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THE CHAT

Volume 26 Number 1
MARCH, 1962

Bulletin of
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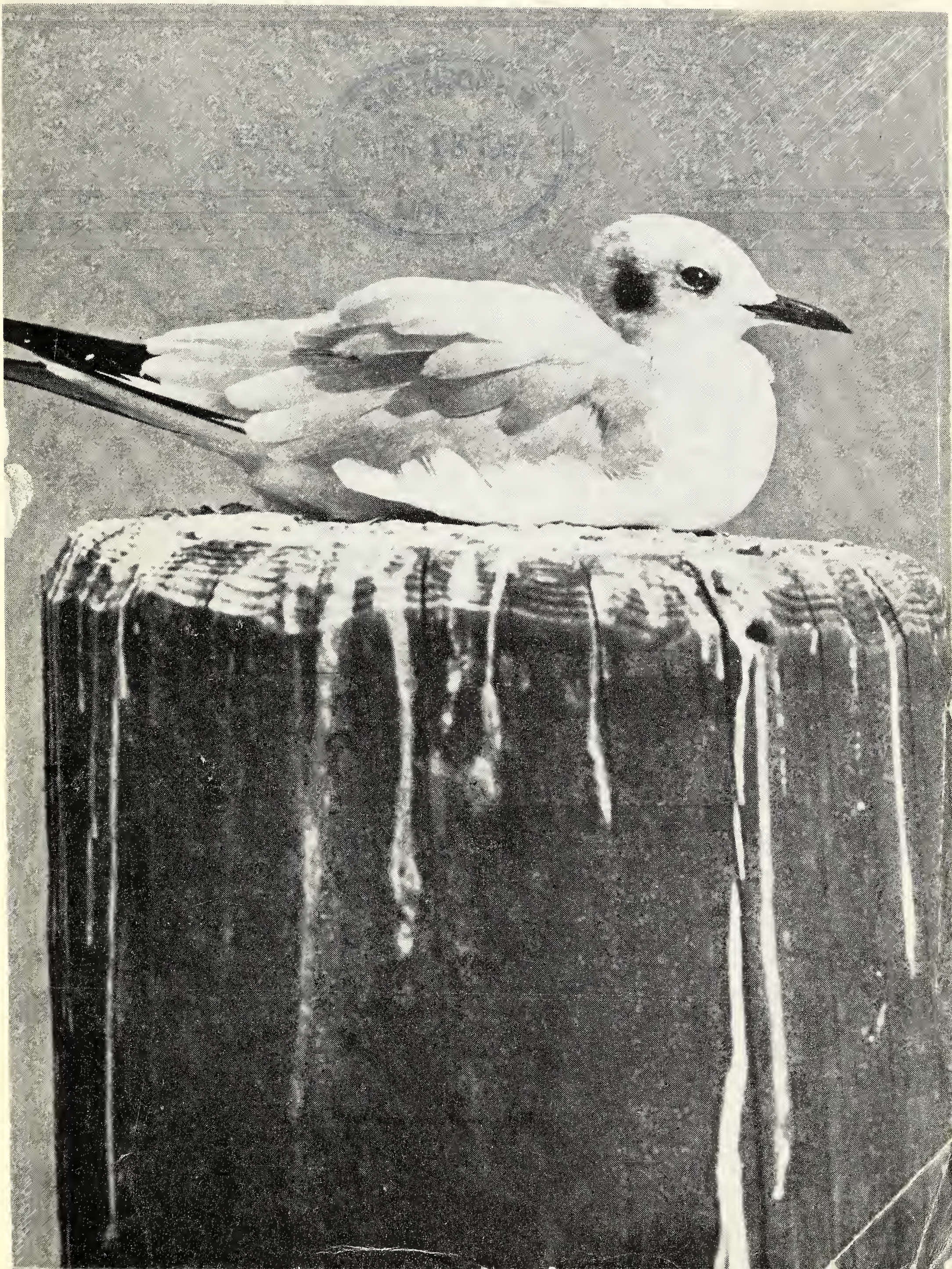

THE CHAT

Volume 26, Number 1
March, 1962

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Editor: David W. Johnston, 1955 Faculty Drive, Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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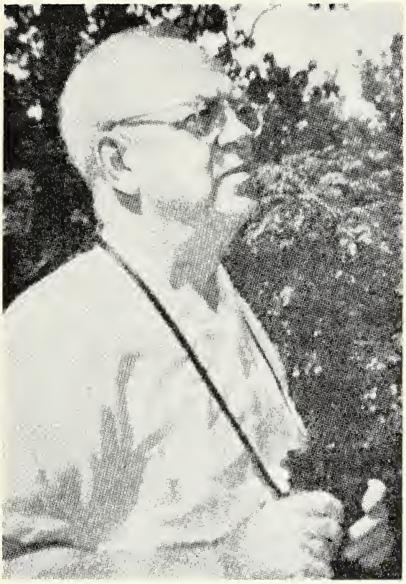
Cover Photo—Bonaparte's Gull in winter plumage. Photographed by Walter Dawn of Woodside, N. Y.

NOTICE

AFTER CAREFUL EXAMINATION OF THE
INNER MARGIN AND TYPE OF MATERIAL
WE HAVE SEWN THIS VOLUME BY HAND
SO IT CAN BE MORE EASILY OPENED
AND READ.

IN MEMORIAM



Waldo Lee McAtee was born in Jalapa, Indiana on January 21, 1883. He was graduated from the University of Indiana with the A. B. degree in 1904 and the A. M. in 1906. His entire professional career was spent in distinguished service as a principal biologist of the United States Bureau of Biological Survey and the U. S. Fish and Wildlife Service. Upon retirement in 1950, Dr. McAtee chose to live in Chapel Hill, North Carolina, where he passed away on January 7, 1962. Dr. McAtee's estate is being cared for by Mr. R. B. McAtee, 3200 N. 22nd St., Arlington 1, Virginia.

The influence of W. L. McAtee on natural history, conservation, and economic ornithology during the first half of the 20th century was profound, as teacher, adviser, consultant, and researcher. He published nearly 1,000 scientific papers, with main emphasis on the food habits of birds. His research interests and publications, however, included also the fields of entomolgy (particularly leaf-hoppers), fishes, and salamanders. His extensive journals and unpublished works are on deposit in the Library of Congress, for the use of future research workers.

Dr. McAtee's twelve years in Chapel Hill were rich in further investigations and writings, including eleven papers in *The Chat,* as follows: (1) "Ricebirds in the Carolinas in 1918," (March, 1953); (2) "Upper Currituck Sound, 1910 and Later," (September, 1953); (3) "A Spring Visit to Winston-Salem," (December, 1953); (4,5,6) "Carolina Bird Names," (in three installments—September and December, 1954, and March, 1955); (7) "Folklore of Birds in the Southeast," (June, 1955); (8,9) "The Birds in Lawson's 'New Voyage to Carolina,' 1709," (in two installments—December, 1955, and June, 1956); (10) "Some Folklore of the Blue Jay," (September, 1956); and (11) "Early Notes on Carolina Birds," (June, 1957).

W. L. McAtee's lifelong interest in the folklore of people and of birds is revealed in several of his papers published in *The Chat.* Though in retirement Dr. McAtee shunned public appearances, he was always warm and cordial to visitors. He loved the University library and community and his quiet, scholarly life in Chapel Hill.

The Carolina Bird Club, in its annual meeting at High Point, North Carolina, on March 20, 1954, elected Waldo Lee McAtee as its first Honorary Member for Life, in recognition of his scientific eminence and in appreciation of his interest in CBC.—*T. L. Quay, Raleigh, North Carolina, February 15, 1962.*

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CHRISTMAS COUNT—1961

By B. R. Chamberlain

Reports of Christmas Counts for 1961 came from 24 localities; 17 in North Carolina and 7 in South Carolina. Concord, N. C., Long Beach, N. C., and Seven Springs, N. C., were reported for the first time. The overall species count reached a new high of 193. Wilmington, Hilton Head, and Charleston, reported 164, 145, and 135 species, respectively. The total individual count was near 2.5 million, of which about 90 per cent were Starlings and blackbirds. Most of the counts were made in clear, cold weather.

Comments upon the rarer species found are included in the following location reports. The Harlequin Duck, found at Wilmington, is reported separately in the General Field Notes section of this issue.

The Eastern Bluebird count of 409, well spread over the territory, is almost double the number found on the preceding Christmas Count, but still well under the counts of 1957, 1958, and 1959, which were close to, or better than, one thousand.

The general distribution of the Starlings and blackbirds, shown in the following table is of interest.

	Coastal	*Lower Piedmont*	*Upper Piedmont*
Starling	900	10,500	1,005,000
Redwinged Blackbird	8500	20,000	54,000
Rusty Blackbird	400	900	165,000
Common Grackle	9000	800	975,000
Brown-headed Cowbird	200	3000	52,000

Wadmalaw Island, South Carolina, January 20, 1962.

Aiken, S. C. (all points within a 15-mile diameter circle, center at Aiken Training Track; swamps and ponds 38%, fields and pastures 23%, mixed woods 19%, pine woods 11%, town 9%).—Dec. 31; 6 AM to 5:30 PM. Clear to cloudy; temp. 23-55°; wind variable, 3 mph. Seven observers in 3 parties. Total party-hours, 24 (22 on foot, 2 by car); total party-miles, 74 (14 on foot, 60 by car). **Total species, 75; total individuals, 10,670.** (Seen in area during count period but not on count day: King Rail, Red-headed Woodpecker.) Particularly noteworthy species found on this count were the **Greater Yellowlegs**—watched by Post and Rial—and the **White-eyed Vireo,** found by Harrington and Schaeffer.—Col. and Mrs. Edward Case, Winthrop W. Harrington, Jr., William Post, Jr., Thomas M. Rial, Frederick Schaeffer, Mrs. A. S. Willcox.

Anderson, S. C. (all points within a 15-mile diameter circle, center at Anderson Airport, including Hartwell Lake backwaters and the city of Anderson; open fields and pasture 25%, deciduous woodland 20%, pine woodland 20%, mixed woodland 15%, ponds and creeks 5%, town 5%, Hartwell area 10%).—Dec. 29; 5 AM to 6 PM; temp. 21° to 38°; wind SE, 2-15 mph. Clear. Seventeen observers; 11 in 4 parties, 6 at feeders. Total party-hours, 35½ (24 on foot, 3½ by car, 8 at feeders); total party-miles, 289 (22 on foot, 267 by car). **Total species, 66; total individuals, about 137,860.** Blackbirds totaled 130,000 and Starlings, about 4600. (Seen in area during count period but not on count day: Pied-billed Grebe, Great Blue Heron, Ring-necked Duck, Cooper's Hawk, King Rail.) Unusual finds: Red-breasted Nuthatch, **White-crowned Sparrow.**—Mrs. R. C. Brownlee, Mrs. Roy Fant, Mr. & Mrs. Willis Fuller, Mrs. A. A. Hutchinson, Mr. & Mrs. Henry Lawrence, Mr. & Mrs. C. B. Nichols, Edward G. Nichols, Bitsy Ramseur, Mr. & Mrs. Howard Spencer, Douglas Tedards, R. C. Tedards, Mrs. R. C. Tedards (compiler), Mrs. Caroline Watson.

Central Beaufort County, N. C. (all points within a 15-mile diameter circle, center where upper Goose Creek enters Pamlico River, including both sides of the river from Bath to Washington; river and river shore 30%, fields 30%, mixed woods 25%, pine woods 5%, feeders 10%).—Dec. 31; 7 AM to 5 PM. Fair; temp. 19° to 54°; wind SSW, 0-15 mph; ground bare, swamps and ponds frozen, river partly frozen. Eight observers (2 part time) in 2 parties. Total party-hours, 20 (8 on foot, 12 by car); total party-miles, 118 (6 on foot, 112 by car). **Total species, 77; total individuals, about 10,429.** (Seen in area during count period but not on count day: Common Loon, Great Blue Heron, Little Blue Heron, Canvasback, Red-breasted Merganser, Great Black-backed Gull, Red-cockaded Woodpecker.) Particularly noteworthy: **Brant**, 2 **Rough-legged Hawks**, a **Red-breasted Nuthatch.** The Brant was watched on a private freshwater pond with other wildfowl at 25 feet. The Rough-legged Hawks were studied at length and compared with nearby Red-tailed and Red-shouldered hawks. The Red-breasted Nuthatch had been present at a feeder since Dec. 23.—Ethel Barkley, Ruth Brown, Phyllis Carver, Margaret Conderman, Geraldine Cox (compiler), James McLaurin, Mary McLaurin, Louise Satterthwaite.

Chapel Hill, N. C. (all points within a 15-mile diameter circle, center at intersection of Columbus and Franklin Streets, including town of Chapel Hill and University campus, Carrboro, Airport, Lake Forest, University Lake, Finley Golf Course, and Mason farm; mixed deciduous woodlands 25%, open fields and farmlands 30%, ponds, lake shores, creek banks 25%, pine woods 5%, wooded residential area 15%).—Dec. 31; 7 AM to 5 PM. Clear AM, cloudy PM; temp. 20° to 40°; wind NE, 1-2 mph. Most waters frozen. Twenty-four observers in 11 parties. Total party-hours, 55½ (40 on foot, 15½ by car); total party-miles, 92 (29 on foot, 63 by car.). **Total species, 71; total individuals, 8394.** (Seen in area during count period, but not on count day: Great Horned Owl, **Bewick's Wren** (Blake), Pileated Woodpecker, Evening Grosbeak.) A **Common Goldeneye** and a **White-crowned Sparrow** were unusual.—Dr. & Mrs. Charles H. Blake, Roy M. Brown, Dr. Robert P. Holmes, Dr. and Mrs. J. Logan Irvin, Mr. & Mrs. Ray P. Kaign, Mr. & Mrs. Gerald R. MacCarthy, Mrs. Wallace Patterson, Wallace Patterson, Jr., Phillips Russell, Wiley B. Sanders, Mr. & Mrs. Robert B. Sharpe, Mrs. Pearson H. Stewart, Mr. & Mrs. Robert P. Teulings, Sue R. Thompson, Matt L. Thompson (compiler), Mrs. Adelaide Walters, Mrs. Fred R. Weedon, Frances L. Yocom.

Charleston, S. C. (all points within a 15-mile diameter circle, center just east of Hwy. 17, 15 miles N of Mt. Pleasant, to include Bull's Island and mainland west just across Wando River; farmland 20%, freshwater ponds and wooded swamps 25%, mixed and pine woods 25%, salt water creeks, marshes and flats 25%, dunes and ocean front 5%).—Dec. 30; 7 AM to 5 PM; temp. 29° to 47°. Clear, frost, a little ice; woods dry, ponds low; wind W-SSW, 4-7 mph. Nineteen observers in 6 parties. Total party-hours, 51¼ (39¼ on foot, 11 in car, 1 in boat); total party-miles, 191 (39 on foot, 144 by car, 8 by boat). **Total species, 135; total individuals, about 28,210.** Bobwhite, Turkey, and a few others were missed. The most unusual find was a **Broad-winged Hawk** (NS). This is the first broad-wing listed in a Charleston Christmas count since 1946, and one of the extremely few winter records for South Carolina. At least 1 Greater Scaup was identified; the count shown refers to Lesser Scaup. The 2 Gray-cheeked Thrushes were identified by the Edwards. Baker and Blitch reported the Swainson's Thrushes.—Mr. & Mrs. E. L. Blitch, Mr. & Mrs. Francis Barrington, B. R. Chamberlain, E. B. Chamberlain (compiler), Mr. & Mrs. Robert H. Coleman, Edmund Cuthbert, R. D. Edwards, R. L. Edwards, John M. Horlbeck, Peter Manigault, I. S. H. Metcalf, Mrs. M. D. Richardson, Newton Seebeck, Miss Elizabeth Simmons, Arthur Wilcox.

Charlotte, N. C. (all points within a 15-mile diameter circle, center at intersection of 7th. St. and Briar Creek as in past 19 years; commercial and residential building continue to destroy habitat; deciduous-pine woods and edge 42%, open fields 28%, streams and ponds 10%, city yards 20%).—Dec. 30; 7 AM to 5 PM. Clear to partly cloudy; temp. 15° to 43°; wind SW, 4-11 mph. Ground bare, small bodies of water and edges of larger bodies frozen. Twelve observers in 4 parties. Total party-hours, 26½ (15½ on foot, 11 by car); total party-miles, 217 (17 on foot, 200 by car). **Total species, 58; total individuals, 6375.** (Seen in area during count period but not on count day: Green Heron, Black Vulture, Screech Owl.) The Red-breasted Nuthatches, **Green Heron** and **Yellow-crowned Night Heron** are particularly noteworthy. The latter possibly was a straggler from a local breeding colony.—Mrs. E. O. Clarkson, Mrs. W. G. Cobey, Lee Jones, Julian Meadows, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mr. and Mrs. Shuford K. Peeler, Mrs. George C. Potter, Frank Ramsey, Mr. and Mrs. L. John Trott (*Cardinal Bird Club, Mecklenburg Audubon Club, guests.*)

Columbia, S. C. (all points within a 15-mile diameter circle, center at State Capitol as last year; deciduous river and creek swamps 35%, pine woods 15%, open fields 35%, lake shores 5%, urban 10%).—Dec. 27; 7 AM to 5:30 PM. Clear; temp. 26° to 63°; wind SSW, 0-15 mph. Fourteen observers in 5 parties. Total party-hours, 39 (29 on foot, 10 by car); total party-miles, 138 (32 on foot, 106 by car). **Total species, 75; total individuals, about 23,461.** Unusual species: Red-cockaded Woodpecker, White-eyed Vireo, **Magnolia Warbler** (1 by Mrs. Kendall; 3 by Mrs. Smith and Mr. & Mrs. Tedards), **Evening Grosbeak.**—Gilbert J. Bristow (compiler), Gordon Brown, Art Buehler, Col. Frank Childs, Mrs. Marion Dwight, Mrs. Ellen Kendall, Jim McKernan, Robert Overing, Mrs. Kay Sisson, Mrs. Ellison D. Smith, Norma Smith, Mrs. Archie Snare, Douglas Tedards, Mr. & Mrs. R. C. Tedards.

Concord, Cabarrus Co., N. C. (all points within a 15-mile diameter circle, centering at the intersection of U. S. Hwy. 601 and State Hwy. 73, in Concord, includes southern tip of Rowan County; lakes ponds and streams 20%, deciduous-pine woods 15%, open fields 63%, city lawns and parks 2%).—Dec. 27; 7:15 AM to 5:15 PM. Partly cloudy; temp. 30° to 58°; wind NNW, 5-10 mph. Ground bare, water open. Two observers in 1 party. Total party-hours, 10 (4 on foot, 6 by car); total party-miles, 104 (3 on foot, 101 by car). **Total species, 61; total individuals, 1706.** (Seen in area during count period, but not on count day: Common Goldeneye, Bufflehead.) Twenty-three Bluebirds and a **Black-and-white Warbler** (at 15 feet) are noteworthy.—Lee Jones, Julian Meadows.

Eastover, S. C. (all points within a 15-mile diameter circle, center in Eastover as in former years, with the exception of Good Will Pond; cultivated fields 33%, pasture 33%, residential 10%, deciduous and pine woods 14%, swampy pond areas 10%).—Jan. 1, 1962; hours and coverage not given. Heavy rain and fog; high wind around mid-day. Two observers in 1 party. **Total species, 52; total individuals, 4925.** A single **Solitary Vireo** (WHF) was a good find. Two-thirds of the Horned Larks seen were judged to be Prairie Horned Larks.—Mrs. F. S. Price, Mrs. W. H. Faver (compiler).

Elkin, N. C. (area as in past years, Elkin, Ronda, Klondike, including Dr. Beale's farm of 90% pasture and cleared land added).—Dec. 26; 8 AM to 5 PM; temp. 19° to 50°; wind, calm in AM to SW 5 mph in PM. Fourteen observers named; coverage data not given. **Total species, 56; total individuals, 4052.** (Seen in area during count period but not on count day: 4 Wood Ducks, 5 Hooded Mergansers, Great Horned Owl, 8 Ring-billed Gulls, 1 Brown-headed Nuthatch, 1 Pine Warbler.) The Green Heron, rare in the area, was present during the fall (TH). The 2 Vesper Sparrows listed do not appear on earlier Elkin counts as far back as 1950.—Dick Atkinson, Roy Caudle, Harold Click, Gary Dornburg, Jeff Earp, Lin Hendren (compiler), Tom Hendren, E. M. Hodel, Fredie Masten, Benny Masten, Larry Masten, Bobby Pardue, Bill Roth, Wendell P. Smith.

Great Smoky Mountains National Park, Tenn.-N. C. (all points within a 15-mile diameter circle, center near Crib Gap, approximately 3 miles east of Cades Cove; open farm land 15%, old fields 20%, forests 35%, roadsides 20%, stream courses and 60-acre reservoir 10%).—Dec. 31; 7:30 AM to 5:30 PM. Overcast; temp. 28° to 40°; wind variable, 1-7 mph; 1-3 in. snow on ground, some water frozen. Nineteen observers in 5 parties. Total party-hours, 48 (41 on foot, 7 by car); total party-miles, 167 (37 on foot, 130 by car). **Total species, 63; total individuals, 2610.** The chickadee count includes Carolina and Black-capped chickadees. This is the fifth Christmas count published from this (Fontana) area of the Great Smoky Mountains and the first to include **Bewick's Wren.** Two were noted.—Robert Bennett, Mildred Edmundson, John Elson, Mary Enloe, Elizabeth French, Mr. & Mrs. H. C. Garlinghouse, David Highbaugh, Dr. Joseph C. Howell, Phillip Huff, Henry W. Lix, Susan Lix, Vernon N. Lix, Arthur Stupka (compiler), Mrs. T. C. Swindell, Dr. Isabel H. Tipton, Dr. Samuel R. Tipton, Mr. & Mrs. George R. Wood (Tennessee Ornithological Society, National Park Service, and guests).

Greensboro, N. C. (all points within a 15-mile diameter circle, center ½ mile SW of WBIG transmitter, as in 1960; deciduous and pine woods 25%, thickets 20%, freshwater lakes and ponds 30%, open fields 10%, marsh and wooded swamps 10%, lawns and parks 5%).—Dec. 30; 7 AM to 6 PM. Partly cloudy early morning to clear the majority of the day; temp. 15° to 34°; wind NW, 15 mph. Twenty-four observers in 9 parties. Total party-hours, 80½ (42½ on foot, 38 by car); total party-miles, 219 (47 on foot, 172 by car). **Total species, 82; total individuals, 2,120,505.** (Seen in area count period but not on count day: Canada Goose, Black Vulture, Marsh Hawk, Bonaparte's Gull (LC), and Great Horned Owl.) This was an unusually good count. Common Merganser (JM & BH), Baltimore Oriole, and White-crowned Sparrow were particularly noteworthy. Fairly high numbers of water birds were recorded as compared with previous years.—Mrs. Jack Brown, Inez Coldwell, Mrs. Floyd H. Craft, Larry Crawford, Mr. and Mrs. G. W. Daniels, Charlotte Dawley, Brad Hawkins (compiler), Bruce Kappel, Robert L. Lasley, James Mattocks, Mrs. Robert McCoy, Ethel McNairy, Mrs. H. L. Medford, Ida Mitchell, Elizabeth Ogburn, Mr. and Mrs. George Perrett, Etta Schiffman, Mrs. W. F. Smyre, Mrs. Paul Stam, Thomas Street, Mrs. Margaret Wall, Mrs. R. H. Weisner (*The Piedmont Bird Club*).

Hampstead, Pender Co., N. C. (all points within a 15-mile diameter circle, center on edge of Inland Waterway 1 mile SSE of Hampstead. This coastal area was slightly north of the Wilmington count area).—Dec. 28; 5:40 AM to 5:20 PM. Cloudy to partly cloudy in PM; temp. 41° to 55°; wind S to NW, 10-25 mph; ground bare, water open, sea moderate. Two observers in 1 party. Total party-hours, 11 (3 on foot, 8 by car); total party-miles, 104 (2 on foot, 102 by car). **Total species, 96; total individuals, about 5605.** Unusual for most years: Red-breasted Nuthatch. An accidental: a **Prairie Warbler**, checked at 20 ft. (GM).—Maurice V. Barnhill, III (compiler), Greg Massey.

Henderson, N. C. (area same as in past years, including meadows, wood edges, lake front and back yards).—Dec. 27; hours not given; temp. 32° to 45°; wind about 12 mph. Clear and pleasant. Coverage data not given. Four observers in 2 parties (one at feeder). **Total species, 49; total individuals, 2040.** Of particular interest: Red-breasted Nuthatch, ten Bluebirds, Baltimore Oriole, **Evening Grosbeak.**—Jeanette (Mrs. A. W.) Bachman (feeder-bound by ankle injury), Ruth Carter, Mariel Gary (compiler), Garnette Myers.

Hilton Head Island, S. C. (all points within a 15-mile diameter circle, center Hilton Head Post Office, including Hilton Head Island, Pinckney Island, Colleton Neck and parts of Bluffton; tidal rivers, creeks and mudflats 30%, fields and freshwater ponds 25%, mixed woods 25%, ocean and beach 15%, pine woods 5%).—Dec. 27; 6 AM to 6 PM. Sunny and warm; temp. 46° to 68°; wind SSW, 5-15 mph. Twenty-seven observers in 10 parties. Total party-hours, 120 (104 on foot, 13 by car, 1 by bicycle, 2 by boat); total party-miles, 323 (106 on foot, 205 by car, 4 by bicycle, 8 by boat). **Total species, 145; total individuals, 12,304.** (Seen in area during count period but not on count day: Gannet, Great Black-backed Gull, Tree Swallow, Brown-headed Nuthatch, House Sparrow.) This was an exceptionally good count. A few species were deleted because they were not initialed or otherwise supported. The following unusual finds were vouched for by Tomkins or Post: an exceedingly large number of Red-throated Loons, Yellow-crowned Night Heron, Common Tern, White-eyed Vireo, and Black-and-white Warbler.—Mr. & Mrs. W. H. Branch, Nancy Butler, Lewis and Polly Cloud, Violet Duane, Mr. & Mrs. Fred Hack, Avery Hack, Mr. & Mrs. David Harrall, Alva Hines, Charlotte Inglesby, Edith Inglesby, Mr. & Mrs. G. H. McBride, Marie Mellinger, Caroline Newhall (compiler), Frederick Post, William Post, Jr., Mr. & Mrs. Carroll Sergeant, Anne Reddy, Marie Reddy, Joyce Swanberg, Ivan R. Tomkins, Alice Woodring.

Lenoir, N. C. (area as in previous years).—Dec. 30; 7:15 AM to 5:30 PM. Fair, cold; temp. low, 14°; wind about 5 mph. Fourteen observers, parties and coverage data not given. **Total species, 40; total individuals, 1098.**—Mrs. J. B. Bernard, Irene Bernhardt, Mrs. R. T. Greer, Margeret Harper, the Misses Florence and Irene Hoyer, Frank Hoyer, Joe Ingram, Steve McCorckle, Fred May, Mary May (compiler), Mr. & Mrs. Thomas Parks, Mrs. C. S. Warren.

Long Beach, Brunswick Co., N. C. (all points within 15-mile diameter circle, center 1½ miles SE of Smith, including Southport, Ft. Caswell, Yaupon Beach, Tranquil Harbor, Lockwood's Folly Inlet, Gore's Landing, Boiling Springs Lakes; ocean beach 15%, salt marsh and sound, 20%, pine barrens 30%, open fields 15%, mixed woods 10%, hardwood swamp and fresh water ponds 10%).—Dec. 20; 5:30 AM to 4:00 PM. Clear, sunny; temp. 50° to 58°; wind NW, 10-15 mph. One observer. Total party-hours, 10½ (5 on foot, 5½ by car); total party-miles, 143 (5 on foot, 138 by car). **Total species, 113; total individuals, 17,968.** This appears to be unusually thorough coverage for one observer. The Bald Eagle was an adult. Unexpected species: **Yellow-crowned Night Heron, Western Kingbird**, Horned Lark, Swainson's Thrush, **Bachman's Sparrow**. The high individual count came from Robins, Common Grackles, and Redwinged Blackbirds.—Greg Massey.

New London, Stanly Co., N. C. (all points within a 15-mile diameter circle, center 2 miles NW of Badin, including High Rock Lake, Yadkin River, Badin Lake, Morrow Mountain State Park, Albemarle City Reservoir, Badin, New London; mixed deciduous woodlands 25%, open fields and farmland 27%, river and lakes 15%, marsh 3%, pine woods 2%, town suburbs 3%, fresh water pond and lake shores 25%).—Dec. 28; 7 AM to 6 PM. Overcast, clearing by 9 AM; temp. 30° to 45°; wind NW, 5-7 mph. 0.3 in., rain before dawn. Twenty-five observers in 6 parties. Total party-hours, 43 (18½ on foot, 20 by car, 4½ by boat); total party-miles, 324 (15 on foot, 305 by car, 4 by boat). **Total species, 74; total individuals, about 10,820.** (Seen in area during count period but not on count day: Baltimore Oriole, Screech Owl.) Robins and Starlings furnished 80% of the total individual count. Unusual species found: **Green Heron**, Red-breasted Nuthatch.—Roy Blalock, Mr. & Mrs. S. K. Boyce, Mr. & Mrs. Barret Crook, Mr. & Mrs. Wade Crowell, George Culp, Henry Culp, Joseph Ferrebee, C. M. Haithcock, Claude Hinson, Donald Maner, Mr. & Mrs. James Mauney, Richie Mauney, Mrs. Charles Paine Meisenheimer, Mrs. Heath Morgan, Sue Trott Parker, Mrs. L. A. Price, John Trott (compiler), Mrs. John Trott, Mrs. L. J. Trott, Mrs. John Whitlock, Bennie Wingate.

Raleigh, N. C. (practically same area as on previous counts; lakes and small ponds 25%, mixed pine and deciduous woodland 40%, open fields 15%, deciduous woodland 20%).—Dec. 28; 7:30 AM to 5:30 PM. Rain in early AM with heavy cloud overcast and cold 10-15 mph wind until noon; partially clear with 5 mph wind in PM; temp. 33° to 40°; ground bare, water open; birds taking cover. Eleven observers in 5 parties. Total party-hours, 48 (38 on foot, 10 by car); total party-miles, 65 (20 on foot, 45 by car). **Total species, 70; total individuals, 6821.** The remarkable find of a **Western Grebe** at this far inland location is reported in the General Field Notes section.—Philip Davis, Mrs. C. H. Green, J. F. Greene, J. L. Lamson, James Parnell, Mrs. John Rhodes, Mrs. Frank Roberts, Mrs. Merle Showalter, Mrs. D. L. Wray, David Wray (compiler).

Rocky Mount, N. C. (same area as in past several years).—Dec. 30; 7:00 AM to 4:30 PM. Clear, cold; temp. 20° to 40°; slight northerly wind. Ice on edge of ponds. Six observers in 2 parties. Total party-hours not given; total party-miles, 198 (3 on foot, 195 by car). **Total species, 62; total individuals, 4593.** Noteworthy: Red-breasted Nuthatch, Baltimore Oriole, **Evening Grosbeak.**—J. W. E. Joyner (compiler), Dan Knight, Norma Knight, Robert Pittard, Sandy Siler, Bob Thomas, John L. Thompson.

Seven Springs, Wayne Co., N. C. (all points within a 15-mile diameter circle, center at entrance to Cliffs of the Neuse State Park, to include the park, Neuse River, Sleepy Creek Lake; fields and roadsides 40%, lakes and ponds 20%, mixed woods 25%, swamps and marshes 15%).—Dec. 28; 7 AM to 5 PM; temp. 30° to 50°; wind NW, 5-15 mph. Light rain AM, cloudy PM. One observer. Total hours, 9 (3 on foot, 6 by car); total miles, 118 (4 on foot, 114 by car). **Total species, 49; total individuals, 1090.** (Seen in area during count period but not on count day: American Widgeon, Wood Duck, White-breasted Nuthatch, Robin, Rusty Blackbird, Brown-headed Cowbird.) The **Snow Goose** had been present on William's millpond for several weeks. The **Palm Warbler** was carefully observed at close range.—Richard H. Siler.

Spartanburg, S. C. (all points within standard circle centering in Spartanburg, including Zimmerman, Pierce and Johnson lakes, and sewage disposal plant; open farmlands 15%, town suburbs 20%, freshwater lakes, ponds and marshes 45%, mixed woodlands 20%). Dec. 31; 7:30 AM to 5:30 PM; temp. 35° to 41°. Increasing cloudiness; wind, SW, 1-3 mph. Seven observers in 4 parties. Total party-hours, 19 (12 on foot, 7 by car); total party-miles, 45 (5 on foot, 40 by car). **Total species, 54; total individuals, 1721 plus.** Red-breasted Nuthatches were found again this year. The Eastern Bluebird count of 18 is interesting; in the 1959 count there were 52 and last year's count contained 7.—Louisa B. Carlisle, MacFarlane L. Cates, Jr., Ruth Crick (compiler), Margaret Hammond, Mrs. J. E. Spivey, Dr. & Mrs. John O. Watkins.

Wilmington, N. C. (all points within a 15-mile diameter circle, center at Myrtle Grove Junction, including Wrightsville Beach and Sound, Carolina Beach, Masonboro and Greenville sounds, Winter Park, Orton Plantation, Cape Fear River, Greenfield Lake, Echo Dairy Farm; mixed pine and deciduous woodland 40%, beach and salt marsh 35%, freshwater ponds and river 20%, pasture 5%). Dec. 30; 5 AM to 6 PM. Fair and cold; temp. 21° to 43°; wind SE, 10-15 mph. Ten observers in five parties. Total party-hours, 42 (20 on foot, 18 by car, 4 by boat); total party-miles, 315 (28 on foot, 277 by car, 10 by boat). **Total species, 164; total individuals, 12,106.** The species count is a new high for Wilmington. Unusually thorough coverage of Masonboro Sound and the barren beach between Wrightsville and Carolina Beaches on foot and by boat was one of the main contributors. The numerous noteworthy species found include, Yellow-crowned Night Heron, Brant, **Harlequin Duck**, Whimbrel, Spotted Sandpiper, Purple Sandpiper, Least Tern, **Dovekie**, Red-breasted Nuthatch, **Prairie Warbler**, **Brewer's Blackbird**, and **Lark Sparrow**. The report was accompanied by detailed data on the rare species, naming the observers. A separate account of the finding of the Harlequin Duck was included. Visiting the area and participating in the count was Mrs. Cecil Appleberry, originator of the Wilmington counts.—Mrs. Sam Alexander, Mr. and Mrs. Cecil Appleberry, Maurice Barnhill, Greg Massey (compiler), Claude McAllister, Mrs. W. C. Mebane, Mrs. Mary Urich, Mrs. Marie Vander Schalie, Henry Watson, Jr.

Winston-Salem, N. C. (all points within a 15-mile diameter circle, center at intersection of Interstate Hwy 40 and Silas Creek Parkway, including Salem Lake, Reynolds Park, Wake Forest College campus, Reynolda, Forsyth County Farm, Tanglewood, and the Yadkin River; pine woods 15%, deciduous woods 20%, open fields and pastures 35%, lakes and bottomland 20%, suburban parks and lawns 10%).—Dec. 30; 6:30 AM to 5:30 PM. Clear and cold; temp. 18° to 39°; wind 2 to 8 mph. Ponds and lakes mostly frozen. Thirteen observers in 7 parties. Total party-hours, 46 (13½ on foot, 32½ by car); total party-miles, 297 (27 on foot, 270 by car). **Total species, 75; total individuals, 4599.** An unusually good count "mostly because of advance planning and a larger number of participants." Good supporting data: Blue Goose, an adult in typical plumage with white head and dark body, first seen in the area several days prior to the count (TWS); two House Wrens and one Bewick's Wren in typical old field habitat (DWJ); **Grasshopper Sparrow**, single bird seen at close range in typical pasture habitat. Weak flight, short tail, flat head and other features noted. (DWJ).—Alex Bohnson, L. Hartsell Cash, John P. Davis, Velma Davis, John Gatewood, David W. Johnston, Thomas W. Simpson (compiler), Doris Simpson, Lucia Simpson, Merrill P. Spencer, Hannah Spencer, Robert H. Witherington, Blanche Wyatt.

	Total Individuals	Beaufort Co., N. C.	Hampstead, N. C.	Wilmington, N. C.	Long Beach, N. C.	Charleston, S. C.	Hilton Head, S. C.	Seven Springs, N. C.	Rocky Mt., N. C.	New London, N. C.	Columbia, S. C.	Eastover, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Concord, N. C.	Charlotte, N. C.	Spartanburg, S. C.	Anderson, S. C.	Elkin, N. C.	Greensboro, N. C.	Winston-Salem. N. C.	Lenoir, N. C.	Gr. Smoky Mts., N. C.
Common Loon	148	..	8	77	9	26	27	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Red-thtd. Loon	664	..	2	45	5	4	608	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	227	1	7	22	5	105	79	..	..	..	..	..	..	..	1	..	..	..	..	..	..	7	..	..	..
Western Grebe	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Pied-billed Grebe	188	8	4	14	5	30	43	2	3	1	18	2	21	..	9	6	8	2	..	..	..	9	1	..	2
Brown Pelican	67	..	1	16	7	11	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	247	..	156	89	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dbl.-cr. Cormorant	87	1	..	19	8	20	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	18	..	..	1	..	7	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	169	..	5	18	7	14	75	1	..	2	5	2	4	4	1	10	3	..	1	..	1	11	3	..	2
Green Heron	9	..	..	3	..	1	3	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Little Blue Heron	85	..	3	5	4	9	62	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Cattle Egret	3	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Egret	162	2	14	40	18	24	58	..	..	..	4	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Snowy Egret	70	..	2	7	2	8	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	46	..	5	10	5	10	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Nt. Heron	106	..	..	22	..	55	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Nt. Heron	4	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
American Bittern	2	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whistling Swan	60	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	1434	213	..	151	..	..	..	3	10	85	..	..	..	..	..	..	..	..	..	..	360	..	612	..	..
Brant	5	1	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Snow Goose	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Goose	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Mallard	1889	75	30	360	..	325	111	2	30	30	48	..	15	..	14	10	..	..	..	206	41	237	350	..	5
Black Duck	989	..	15	437	1	152	76	..	1	25	..	..	..	..	4	19	39	..	..	14	2	177	24	..	3
Gadwall	122	..	12	8	..	75	7	..	..	..	..	..	..	..	1	..	8	..	..	..	..	11	..	..	..
Pintail	766	..	..	292	1	450	6	..	..	2	..	..	..	..	6	..	..	..	..	..	..	9	..	..	..
Gr.-winged Teal	2081	..	8	15	17	2000	28	..	..	..	..	..	..	..	..	..	5	..	..	..	..	8	..	..	..
Bl.-winged Teal	72	..	..	57	..	13	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Widgeon	324	2	52	8	2	50	51	..	..	3	..	..	..	..	32	..	75	..	..	..	3	45	1	..	..
Shoveler	797	1	3	39	..	750	..	..	..	..	1	..	..	..	..	..	2	..	..	..	..	..	1	..	..
Wood Duck	46	..	..	12	5	19	..	..	..	..	8	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Redhead	11	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..
Ring-necked Duck	1669	14	1	8	..	401	40	..	..	..	132	30	12	..	600	10	120	45	19	..	..	208	..	..	29
Canvasback	56	..	..	7	..	30	4	..	..	..	..	..	..	..	3	..	1	..	..	..	..	11	..	..	..

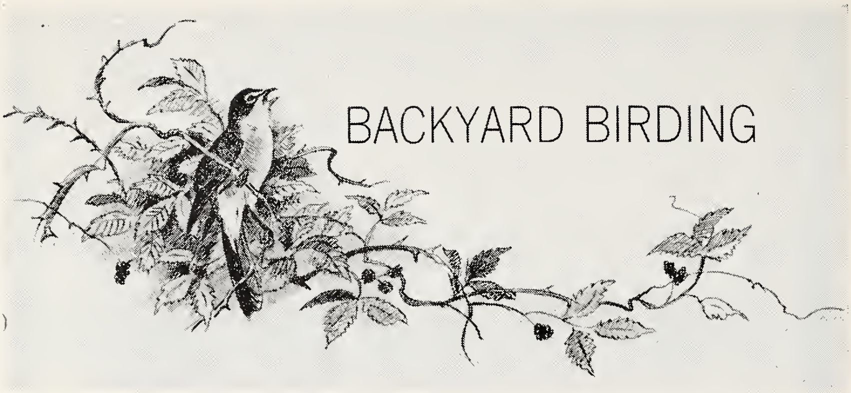
Scaup (sp.)*	10726	18	2	48	..	10000	341	..	1	25	..	..	..	..	155	10	3	..	..	..	..	73	50	..	..
Com. Goldeneye	26	..	..	8	..	12	1	..	..	..	..	..	4	..	..	1	..	..	..	..	..	..	..	..	..
Bufflehead	414	8	18	75	1	107	44	..	..	2	..	..	1	..	2	..	..	..	..	..	..	142	13	..	1
Old Squaw	14	..	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harlequin Duck	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surf Scoter	48	..	..	6	..	8	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Scoter	140	..	..	4	3	8	125	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	912	78	..	4	..	750	11	..	..	..	..	..	..	..	11	6	40	..	..	..	..	2	8	..	2
Hooded Merganser	233	4	3	64	4	50	57	..	..	..	..	3	9	..	3	25	2	..	..	..	..	9	..	..	..
Com. Merganser	11	..	..	4	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Red-br. Merganser	187	..	26	126	9	8	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
Turkey Vulture	381	3	4	17	2	69	107	5	14	12	3	3	4	4	..	19	18	6	2	8	33	35	13	..	..
Black Vulture	288	2	1	5	3	118	80	1	2	4	5	13	26	4	..	11	2	..	..	9	..	..	2	..	..
Sharp-sh. Hawk	6	..	..	2	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Cooper's Hawk	19	..	..	2	..	2	1	..	1	2	2	..	1	..	..	..	..	..	..	..	2	2	2	..	2
Red-tailed Hawk	112	3	1	3	1	1	18	3	12	3	10	..	4	3	4	6	4	6	..	9	5	11	4	..	1
Red-shld. Hawk	61	2	1	9	2	8	3	..	..	1	19	..	4	..	2	1	..	1	1	1	1	4	1	..	..
Broad-wg. Hawk	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rough-leg. Hawk	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bald Eagle	7	..	..	2	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marsh Hawk	79	1	3	9	1	15	11	1	8	6	4	1	..	..	1	1	1	1	1	13	1	..	..	..	..
Osprey	14	..	..	1	1	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Peregrine Falcon	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pigeon Hawk	6	..	..	2	..	1	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparrow Hawk	275	23	6	29	15	16	45	12	19	9	21	4	6	7	12	2	2	3	1	20	4	13	2	..	4
Ruffed Grouse	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Bobwhite	765	30	10	65	..	..	17	..	30	16	17	..	37	15	42	91	28	39	26	55	46	137	46	6	12
Turkey	20	..	..	..	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
King Rail	3	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	75	..	1	18	..	14	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sora	2	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Com. Gallinule	33	..	..	2	..	13	16	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	864	29	30	121	35	213	35	..	..	..	28	..	..	..	2	..	90	..	4	..	..	225	2	..	50
Am. Oystercatcher	404	..	..	36	..	350	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semip. Plover	861	..	5	15	3	518	320	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piping Plover	50	..	..	4	1	..	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	893	76	4	76	..	66	51	4	22	20	70	19	139	2	10	32	33	50	67	14	78	41	9	2	8
Bl.-bel. Plover	487	..	17	68	12	256	134	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	40	..	..	9	..	5	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	9	1	2	5	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Com. Snipe	133	..	..	34	1	27	26	..	3	5	9	2	5	..	22	..	1	3	1	1	..	5	1	..	7
Whimbrel	2	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	9	..	..	3	..	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willet	126	..	..	44	36	21	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Yellowlegs	76	..	1	19	1	40	11	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Les. Yellowlegs	38	..	..	2	..	20	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	16	..	..	3	..	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Dunlin	1335	..	227	83	12	43	970	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher	311	..	..	10	6	152	143	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semip. Sandpiper	308	..	..	151	..	2	155	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Sandpiper	228	..	..	38	15	40	135	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sanderling	428	..	143	132	80	..	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	1657	6	370	932	109	77	156	..	..	2	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Ring-billed Gull	6963	3660	1790	..	426	106	267	..	2	30	433	..	..	..	..	..	..	83	..	160	..	4	2	..	..
Laughing Gull	52	..	..	15	7	..	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	66	..	1	13	6	4	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	185	..	12	40	6	10	117	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Tern	5	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Tern	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	45	..	12	11	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	16	..	..	12	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	235	..	24	203	3	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dovekie	3	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	2570	13	82	194	21	185	160	178	12	195	57	9	15	48	36	175	34	398	52	79	108	144	149	94	132
Ground Dove	7	..	..	..	..	3	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Owl	2	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Screech Owl	7	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	1	..
Gr. Horned Owl	11	..	1	4	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Barred Owl	18	..	2	7	..	..	2	..	..	2	..	..	..	..	..	1	..	..	..	2	..	1	..	..	1
Belted Kingfisher	149	3	5	23	4	22	29	1	4	3	12	..	6	..	10	3	1	3	..	4	2	7	2	1	4
Yel.-sh. Flicker	809	47	20	129	14	142	76	17	12	16	44	5	53	10	30	44	10	36	15	19	7	31	18	7	7
Pil. Woodpecker	117	1	1	4	3	46	25	1	1	1	2	..	6	..	..	..	..	..	..	2	4	2	..	1	17
Red-bel. Woodpecker	414	10	4	31	7	65	48	10	5	11	22	2	22	6	8	35	8	25	5	8	6	34	34	5	3
Red-hd. Woodpecker	57	..	..	6	1	..	4	..	1	..	1	1	..	1	4	..	..	4	3	1	..	1	..	2	..
Yel.-bel. Sapsucker	225	3	1	25	5	44	18	4	3	3	4	1	18	5	1	17	4	11	4	4	9	15	18	2	6
Hairy Woodpecker	78	1	..	10	3	5	11	..	..	7	1	..	..	..	1	10	1	..	..	2	1	4	8	1	12
Downy Woodpecker	378	7	4	17	5	34	18	5	5	18	18	..	12	9	6	38	4	18	6	7	19	38	28	7	55
Red-cock. Woodpecker	28	..	..	6	5	8	..	..	..	..	2	..	7	..	..	..	..	..	..	..	..	..	..	..	..
Western Kingbird	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Phoebe	120	5	1	17	3	20	27	1	..	3	3	..	4	2	..	8	2	..	1	2	6	4	3	..	8
Horned Lark	265	..	..	..	3	..	..	..	105	12	..	75	..	..	..	..	..	7	2	..	..	50	11	..	..
Tree Swallow	132	..	..	5	..	127	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Jay	1781	34	11	96	21	228	121	9	20	62	154	13	107	35	108	81	19	138	92	113	23	136	69	47	44
Common Crow	2282	7	27	38	24	61	132	30	67	127	52	2	24	39	40	150	74	209	24	267	230	145	146	7	360
Fish Crow	257	12	3	118	9	25	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Car. Chickadee	1285	36	3	93	6	112	76	8	8	42	56	2	14	22	15	95	33	103	17	47	29	196	116	16	140
Tufted Titmouse	780	15	2	41	4	67	31	8	8	22	32	2	10	20	10	75	4	88	37	38	33	92	60	16	65
White-br. Nuthatch	249	7	..	1	1	2	..	..	1	13	..	..	..	7	2	38	2	34	8	11	17	43	30	18	14

Red-br. Nuthatch	102	1	1	9	.	..	..	..	2	2	..	..	2	6	..	4	..	4	2	3	2	8	22	1	33
Brn.-hd. Nuthatch	216	7	1	55	7	11	..	..	..	6	27	..	16	8	1	13	2	28	5	8	..	15	6	..	..
Brown Creeper	52	..	..	4	..	3	1	..	..	2	4	..	..	8	1	4	..	1	3	1	..	5	6	1	8
House Wren	40	..	3	8	8	12	6	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..
Winter Wren	45	5	..	5	..	2	..	1	2	..	..	..	..	..	1	3	..	..	2	1	..	5	1	..	17
Bewick's Wren	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2
Carolina Wren	385	8	7	18	9	48	32	8	11	9	27	3	20	5	6	41	5	17	10	8	9	21	29	14	20
Long-bil. M. Wren	20	..	..	16	1	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	25	..	..	12	2	1	5	..	..	1	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	986	23	15	76	16	38	74	7	33	30	57	7	35	29	52	73	15	95	24	69	18	133	57	6	4
Catbird	29	..	1	6	..	16	2	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	1
Brown Thrasher	233	5	4	18	2	79	17	4	2	1	17	3	24	..	6	7	..	3	19	19	..	2	..	..	1
Robin	22756	31	152	1824	6293	6143	166	..	2	5407	1011	238	249	1	1	134	4	23	3	14	1000	28	26	..	6
Hermit Thrush	107	1	3	13	2	28	5	2	..	4	1	..	2	1	1	5	..	1	..	4	4	1	4	..	25
Swainson's Thrush	3	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gray-ch. Thrush	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Bluebird	409	..	2	6	21	22	35	13	..	33	34	..	28	10	38	27	23	29	18	12	21	6	14	5	12
Bl-gray Gnatcatcher	12	..	..	6	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Golden-cr. Kinglet	236	..	2	10	.	5	4	2	2	17	2	3	15	32	4	20	2	9	4	2	1	16	25	..	59
Ruby-cr. Kinglet	606	36	4	45	8	166	37	6	5	3	74	2	64	12	9	24	4	16	32	16	4	13	13	1	12
Water Pipit	793	..	131	92	18	50	61	..	..	41	..	251	3	..	..	36	21	1	86	..	..	2	..	..	..
Cedar Waxwing	1450	..	..	13	11	..	6	..	63	76	20	217	366	4	15	140	72	278	79	..	112	59	19	..	..
Log. Shrike	462	11	5	31	7	18	44	10	51	26	32	5	5	16	19	19	20	14	23	28	17	40	9	1	5
Starling	1022099	106	65	541	44	14	206	159	1425	2759	676	303	2369	697	964	4184	498	465	300	4632	772	1000000	734	76	110
White-eyed Vireo	5	..	..	..	..	1	2	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Solitary Vireo	6	..	..	..	..	4	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-&-wh. Warbler	3	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Orange-cr. Warbler	14	..	2	6	3	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Magnolia Warbler	4	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Myrtle Warbler	2500	182	191	697	165	443	245	30	57	22	46	3	56	23	5	106	37	54	17	15	11	26	37	2	30
Yel.-th. Warbler	3	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pine Warbler	204	3	7	63	10	18	17	2	7	2	18	..	16	4	2	15	..	4	5	2	..	4	4	1	..
Prairie Warbler	4	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palm Warbler	30	..	..	9	6	1	9	1	..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Yellowthroat	61	1	..	35	4	3	8	..	..	..	1	..	9	..	..	..	..	..	..	..	..	..	..	..	..
House Sparrow	6336	44	30	372	14	6	..	53	643	205	1355	159	57	165	800	42	111	337	100	650	81	528	184	350	50
East. Meadowlark	4268	95	13	510	19	151	595	152	379	281	262	99	31	145	89	156	31	104	76	313	124	224	117	100	202
Redw. Blackbird	83318	4725	403	516	1104	573	1594	6	170	111	15000	3000	1805	60	..	20	7	183	5	50000	..	4000	14	..	22
Baltimore Oriole	32	4	..	..	..	..	..	..	7	..	..	..	..	1	11	4	..	..	..	..	..	5	..	..	..
Rus. Blackbird	165932	10	..	9	..	21	364	..	6	..	500	17	2	..	..	2	..	..	..	5000	..	160000	1	..	..
Br. Blackbird	1	..	..	1	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boat-tail. Grackle	1781	..	323	70	18	6	1364	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Com. Grackle	989085	11	700	142	8250	241	104	2	1	13	790	2	3801	..	..	..	..	14	..	75000	..	900000	14	..	..
Br.-hd. Cowbird	55659	..	6	164	7	6	41	..	500	53	492	47	75	15	2000	7	..	2025	..	20	200	50000	..	..	1
Cardinal	2507	26	28	61	8	59	406	63	40	117	146	15	49	20	67	221	35	195	56	53	84	343	210	62	143
Evening Grosbeak	134	2	..	..	..	..	..	..	111	..	5	..	..	16	..	..	..	..	..	..	..	..	..	..	..
Purple Finch	410	3	5	14	8	1	..	..	3	20	2	..	8	38	8	43	8	101	43	3	16	43	82	9	5
Pine Siskin	118	..	..	..	..	..	..	..	..	..	..	..	..	..	25	..	..	..	..	..	2	53	38	..	..
Am. Goldfinch	1199	6	79	90	76	74	40	6	6	86	78	13	86	39	55	102	2	80	15	32	13	144	39	12	26
Ruf.-sided Towhee	1074	18	22	100	7	133	10	11	6	17	145	10	116	14	80	45	6	41	67	87	24	44	38	22	11
Ipswich Sparrow	12	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	1226	3	2	46	29	85	26	13	74	8	765	17	10	..	16	10	9	18	2	85	1	..	6	1	..
Grasshopper Spar.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Henslow's Sparrow	9	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sharp-tail. Spar.	17	..	..	4	..	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Seaside Sparrow	57	..	..	49	2	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	241	..	..	4	37	22	125	1	..	..	14	..	2	..	..	1	..	..	..	21	2	..	12	..	..
Lark Sparrow	2	..	..	2	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bachman's Sparrow	6	..	..	2	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Slate-col. Junco	7728	366	55	185	258	137	61	133	483	487	126	104	107	296	1077	1186	47	491	48	173	140	866	524	38	340
Chipping Sparrow	681	30	48	44	6	484	53	..	1	1	11	..	1	..	..	2	..	..	..	..	..	..	..	..	..
Field Sparrow	1767	22	2	103	10	112	42	..	1	14	58	30	149	9	104	70	7	142	98	42	10	491	101	10	140
White-cr. Sparrow	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	6	6	9	15	2	8	..
White-thtd. Spar.	4323	97	54	552	144	291	141	90	80	118	176	..	240	117	71	452	38	157	164	297	258	389	221	121	55
Fox Sparrow	190	3	3	51	4	16	12	3	4	2	8	1	8	1	16	15	..	14	4	1	8	1	10	2	3
Swamp Sparrow	481	8	2	25	4	61	44	..	..	2	1	..	116	..	12	4	2	6	..	..	..	36	8	..	150
Song Sparrow	2084	10	24	81	37	121	74	5	5	22	172	4	119	5	55	123	17	111	16	139	37	552	127	22	106
No. of species	193	77	96	164	113	135	145	49	62	74	75	52	75	49	70	71	61	58	54	66	56	82	75	40	63
No. of individuals	2439365	10429	5605	12106	17741	28684	12304	1090	4593	10820	23461	4925	10670	2040	6822	8395	1706	6375	1721	137881	4052	505 2120-	4599	1098	2610

* See text for scaup species



BACKYARD BIRDING

Readers have had visits from nuthatches. Weston Clinard from Hickory, North Carolina, reports the following:

> For several years I have had at least one pair of Brown-headed Nuthatches visiting my feeders. This morning (January 12, 1962) I counted five of them at one time on the suet feeder. The ground is covered with snow and the temperature is in the low twenties.
>
> I have a device, a relic from my chicken-raising days, which should be in general use at times like the present (weatherwise). It is an electrical appliance which I used to put in the drinking fountain for my chickens to keep the water from freezing. Now I use it in one of my birdbaths. It doesn't raise the water temperature over fifty degrees. You should have seen the many kinds of birds bathing yesterday; now and then there were three or four different kinds at the same time.

From Mrs. P. B. Hendrix, of Bird-Haven, Route #1, Lexington, South Carolina, we heard of another nuthatch:

> A Red-breasted Nuthatch was seen by the writer on Wednesday afternoon, January 31, 1962. It is the first one to be definitely identified. About twelve or fifteen years ago, some members of the Columbia Bird Club reported having seen one. However, this is the first time that we have been able to see it well enough and for a long enough period to say it was the Red-breasted. The Brown-headed Nuthatch is a permanent resident here and has been for the past twenty years. The White-breasted has never been seen here.

A letter from Mrs. Edward Marrow, a CBC member from Tarboro, North Carolina, contained the following:

> On Sunday, January 21, just before one o'clock, Ed and I saw a male and female Baltimore Oriole in our yard. Both were in full spring plumage and very lovely. The male perched immediately outside our window in a shrub and the female perched in the oak tree. Minutes thereafter, the male flew to the two sweetgum trees and the female flew into a magnolia. The male then joined her in the magnolia. We observed them for a total of three or four minutes. Our neighbors next door saw the male earlier that morning eating bread which was on the ground outside their window. Their entire family of four saw the bird at approximately nine o'clock that same morning. We have not seen the birds since that time, although we have been watching for them.

Mrs. Edward McMaster, 311 North Congress Street, Winnsboro, South Carolina, gives us a real thrill with a rare find:

> We had a very unusual experience just before Christmas and have wanted to share it with you.

> On the night of December 22, T. W. Ruff, Jr. called asking us to come to his apartment to verify his identification of a little bird that he had rescued that morning. The bird had flown against a plate glass window on Main Street and had been injured. The young man had cared for him all day and had gone to the library for identification. We could hardly believe that he could be a *Painted Bunting*! But he was. We were very thrilled to see our first painted bunting *here*, although we were quite mystified and amazed at his presence. Could he have been lost in migration?
>
> We secured a cage from a friend and planned to take care of the little bird until warm weather. Then we had planned to take him down to your place and release him when the buntings returned in the spring. When Edward went to get him the next morning, he found that he had died during the night. We were grieved, as we had wanted to care for him. Someone suggested that we have him mounted. So now the beautiful little creature is in our freezer, awaiting the services of a taxidermist.

(Kay Sisson and I spent a delightful day in Winnsboro at the home of Mr. and Mrs. McMaster, discussing birds and other mutual interests. We had the privilege of bringing the bunting back to Columbia with us so Mrs. Sisson could turn him over to the taxidermist. How strange it was to see this little bird in all the beauty of the plumage of the mature male Nonpareil here in upper South Carolina in the middle of winter! . . . Department Editor.)

Mrs. A. W. Bachman of Henderson, North Carolina, makes us envy her when she writes thus of her birds:

> I just looked out the window to see eleven Evening Grosbeaks, nine Purple Finches, a Baltimore Oriole and my one Red-breasted Nuthatch all feeding at the same time. What more could one wish?

Mrs. R. Connor Tedards, Route Two, Brown Road, Anderson, South Carolina sent us the following (February 5, 1962):

> I recently had a most exciting experience with Barn Owls. Owls are always exciting to me, but these particularly so, because up until three weeks ago I had not seen a Barn Owl for three years.
>
> On January 17, Mrs. Joe Watson and I spent a fruitless morning in search of a pair of Pileated Woodpeckers that I had seen a week previous. As we prepared to walk the two miles out of the woods, Mrs. Watson said, "By the way, someone called me yesterday to say that if I were interested, they could tell me where we might see two families of Barn Owls." We made haste out of the woods, to the car, and to the nearest telephone to request permission to look for the owls. The "owner" of the owls . . . told us that the owls had nested on the property for years, that the family was quite fond of them, and at last count the birds numbered seven.
>
> We drove to the house which is about four miles southwest of Anderson. It is on a hill in a grove of oak trees. The fields surrounding the house are not cultivated and have grown up in broom straw—certainly excellent hunting for the birds.
>
> We had no trouble locating the trees. One was a large, old, White Oak, with a deep hollow in the top. This tree is right beside the highway about twenty feet from the drive to the house. The other favorite tree is a Red Cedar in a field to the side of the house. We found numerous fresh pellets under both trees. The pellets we examined contained the remains of either rats or mice.
>
> Up the trunk of the oak, the son of the house had constructed steps, so that he might observe the nestlings.
>
> We made plans to come back that evening to see the owls come off the roost. It was several minutes after sundown by the time we had gotten back. We were too late to see them come off the roost, but were amply rewarded, as we approached the house, with the sight of seven owls hunting in the fields. We parked in the driveway and stepped out of the car. The owls were silent when we first arrived.

> They would hunt a few minutes, then fly to a tree in the yard and perch. It was so dark that we could not tell if they were consuming prey. After we stood a few minutes, one flew directly over us and uttered a hawk-like squeal. It sounded somewhat like the squeal of the Red-tailed Hawk, starting on a very high clear note, and growing quite hoarse as it descended in pitch. The hissing of the birds has been adequately described, but we were surprised at the loudness of it. There was also much clacking of bills accompanying the vocalizing.
>
> Not being at all familiar with this species, or their habits through direct observation, we observed some of their characteristics with much interest. It was a clear, bright night, and we were able to see them quite well.
>
> They hunted very low over the ground, quartering in the manner of a Marsh Hawk. We observed them pouncing into the grass, and remaining on the ground for some time, also in the manner of the Marsh Hawk. They hunted quite close to the house for fifteen minutes or so, then each went off to hunt further afield. On our way home, one of them flew in front of the car a mile or so beyond the house. These owls are very white on the breast, and the faces appeared all white, except for the dark ring of feathers around the facial disks.
>
> I made another trip the following evening with my sister, Mrs. Ellison Smith, and the subsequent evening with my husband; although we did not get quite the performance of the first night, we did see the birds. The second evening we arrived a few minutes before sunset. We pulled the car under the overhanging branches of the oak, on the side of the highway. One owl was looking out of the top of the tree. He surveyed the situation for some minutes, then glided down from the tree almost to the ground before flapping his wings. The only discernible sound was the scratching of his claws on the bark of the tree. He was followed at regular intervals by four more. The other two flew in from the direction of the cedar tree. Instead of immediately going hunting, they sat about in various trees, making odd sounds....
>
> The third trip to the oak yielded but one owl. The others had left the roost and were nowhere to be seen. Although it was the same time as the previous evening by our clock, it was cloudy with a light sleet falling, and the "owl clock" was faster than ours. The lazy fellow continued to sit in his roost, preen his feathers, and observe us as we observed him.

While riding through the countryside Monday and again yesterday (February 7), Mrs. Sisson and I saw more and more *bluebirds*. Now . . . where are these birds going to nest? The only available boxes we saw were the rural route mail boxes. Bluebirds usually nest two or three times during the summer. Even if this is in your hands too late for the first brood, please let every member of CBC determine to put up as many boxes as possible as soon as you can. From the *Audubon Field Notes*, October, 1961, p. 469, we quote:

"At Warren, Pa. the remarkable 'Operation Bluebird' nesting project developed by William Highhouse continues to be successful. This year 53 pairs of Eastern Bluebirds fledged 181 young on the nesting attempts and 25 pairs raised 86 on the second nesting. . . . Highhouse feels that his hundred boxes are capable of producing about 1000 Bluebirds every four years."

From W. G. Duncan, 519 Ridgewood Rd., Louisville 7, Ky., we can get the specifications for the famous Duncan Bluebird boxes. These may be ordered or built, as there is no commercialization of the project, simply the desire to "Bring back the Bluebird." Mr. Duncan sends out a "Conservation Notebook," a sheet in which he reports the experiences of various localities in which people interested in birds have used or are using the Duncan boxes. Let us start an "Operation Bluebird" in this department. Put up as many boxes as you can. Keep a record of the number used, and the number of birds raised to adulthood. Then send your report to this department. Good luck!—A. R. Faver, *Department Editor, Eastover, S. C. February 9, 1962.*

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

The number and spread of the reports of Evening Grosbeaks in the Carolinas so far this year (mid-January) indicate a winter population that will warrant careful study. Reports are needed. If the pattern of other years is followed, some grosbeaks will remain into early May. When possible the reports should include initial and final observations and peak numbers, sex ratios, food and feeding habits, etc. Any information on roosts will be a real contribution. The direction of early morning arrivals and final departures should furnish good clues to those who are feeding sizable numbers of birds daily. As far as we know, no Evening Grosbeak night roost has ever been located in the Carolinas.

Two Sight Records of the Western Grebe in North Carolina.—The Western Grebe (*Aechmophorus occidentalis*) breeds on fresh-water lakes of western North America and winters primarily along the Pacific coast. East of the Rockies and bordering Great Plains, this bird is a straggler. Its occurrence along the Atlantic coast is accidental, the only specimen record being from South Carolina (*Check-List of North American Birds*, American Ornithologists' Union, p. 7, 1957). The two sight records described below will constitute the first reports of the occurrence of this largest of the North American grebes in North Carolina.

On March 30, 1959, Parnell and Quay identified a Western Grebe in excellent plumage on the North Pond of the Pea Island National Wildlife Refuge, in Dare County on the outer banks of North Carolina. The bird was first seen resting on a mat of grass at the water's edge of the south dike, in the lee of a 15 mph wind, at a distance of only 20 yards. The time was about noon and a light rain had been falling intermittently all morning. The bird swam slowly away from the shore and out into the open pond, which allowed adequate time for satisfactory observation through 7 x 50 binoculars and reference to Peterson's *Field Guide to the Birds*. The large size, long neck, and contrasting black and white plumage were unmistakable. We had been on Hatteras Island studying the birdlife for five days, and were well up on our identification of other birds such as the Horned Grebe, Red-throated Loon, and Red-breasted Merganser, with which one might at times confuse the Western Grebe. We looked for this bird again on April 1, as we were leaving our Hatteras Island camp for Raleigh, but our search was without success.

On December 20, 1961, Parnell and Roberts identified a Western Grebe on Lake Johnson, a city reservoir about three miles south of Raleigh, Wake County, North Carolina. When first seen, the bird was swimming alone and in the open about 100 yards offshore. The distinguishing field marks of grebe-shape, large size, long white neck, and black body were satisfactorily observed through 7 x 50 binoculars. While still being watched this first time, the bird took flight and flew past the observers only 50 yards away, affording clear view of the all-white underparts and typical grebe flight-shape. The bird again settled on the water and then swam away across the lake. This observation was made in cold and cloudy weather, during the severe cold wave of the period that had swept in from the West. An effort by Roberts to see this bird again on December 29 was not successful.—JAMES F. PARNELL, THOMAS L. QUAY, AND FRANKLIN L. ROBERTS, *Zoology Department, North Carolina State College, Raleigh, N. C., January 20, 1962.*

A Record of the Greater Shearwater in 1960 at Hatteras.—The following brief note is extracted from a personal letter to the Department Editor, dated December 18, 1961: "I note that *Birds of North Carolina* does not list many records for the Greater Shearwater [*Puffinus gravis*]. We found a semi-mummified one on June 12, 1960, almost at the foot of the Hatteras lighthouse. I have kodachrome slides of the bird, but did not save the specimen."—KENNETH C. PARKES, *Carnegie Museum, Pittsburg, Penn.*

Cinnamon Teal Taken in South Carolina.—On December 30, 1961, the Cinnamon Teal (*Anas cyanoptera*) was removed from the South Carolina hypothetical list when Theodore A. Beckett, III, took an adult male from a 25-acre wooded pond 11 miles northwest of Charleston. Other species found on the pond at the time were Lesser Scaup, Blue-winged Teal, American Coot, and Common Gallinule.

On January 15, 1962, Mr. Beckett got within 30 feet of another male Cinnamon Teal on the same pond.

The collected specimen is being mounted for Drayton Hastie, Jr., of Charleston. A colored photograph of the bird is to be placed in the Charleston Museum files.

Since F. M. Weston reported this teal in Beaufort County in 1933 (*Auk*, 50:219), there appears to be but one recorded occurrence in South Carolina—a male was watched on a Bull's Island pond for several days and reported there on April 21, 1961, by Helen Goldstick and Molly Theban (*Audubon Field Notes*, 15:319).

A sight record near the west end of Lake Mattamuskeet, North Carolina on February 5, 1935, by J. B. Hodges, a native and for many years a guide in that area, seems to be the only North Carolina record (*Chat*, 1:51).—E. BURNHAM CHAMBERLAIN, *Charleston, South Carolina, January 16, 1962.*

Harlequin Duck in North Carolina.—On December 30, 1961, Greg Massey and I saw a male Harlequin Duck (*Histrionicus histrionicus*) at Carolina Beach, North Carolina. The head was green, the breast gray or greenish-gray, the flanks chestnut, and the rear sections dark; there was a complicated pattern of white markings, all of which agreed in detail with the plate (p. 35) in Peterson's *Field Guide To The Birds*, second edition. The white crescents on the front of the head were separated only by a thin, dark line as seen from the front, leaving the impression of a completely white head. The horizontal neck marks also did not quite meet in front. The wings were dark below with a hint of a light flash when flapped. The bill was a bluish-gray; the eye could seldom be distinguished against the dark head.

The bird was swimming into the wind and currents beyond the surf line about 100 yards offshore and maintained a nearly constant position beyond a rock jetty (which would have been submerged at high tide). It was observed preening several times.

The duck was observed for 35 minutes between 3:30 PM and 4:10 PM at distances of around 125 yards with 8x40 binoculars and a 40x scope by both Greg Massey and myself. The light was good, coming from the side. The weather was cold, the wind about 10-15 mph from SE; a cold front had come through two days earlier.

The Harlequin Duck is not recorded in *Birds of North Carolina.* It now appears that this bird cannot be collected, so it constitutes a record for the hypothetical list only. It was not present the next morning for the Appleberrys to see the bird; however, additional efforts will be made to find and show it to other observers.—MAURICE BARNHILL, *University of North Carolina, Chapel Hill, N. C., January 5, 1962.* (The bird was not found again after several trips by Greg Massey, up to Jan. 15—*Dept. Ed*).

Golden Eagle in Sumter County, South Carolina.—On December 31, 1961, while driving to Columbia, we saw an immature Golden Eagle (*Aquila chrysaëtos*) in the Manchester State Forest between Pinewood and Wedgefield, in Sumter County, S. C., at about one PM. It was flying low and gave us a good view of the banded tail, white blotches under wings, small head, etc. This is the first Golden Eagle I have seen since last winter. R. D. EDWARDS, *Ardea, McClellanville, S. C., January 1, 1962.*

Laughing Gull Colony on Gull Island in Pamlico Sound.—North Carolina's representative of the common expression, "Gull Island," lies less than two miles west of the Outer Banks in Pamlico Sound, approximately 14 miles north of Cape Hatteras. My wife and I visited the island colony on June 4, 12, and 19, 1960, in order to study the behavior of Laughing Gull (*Larus atricilla*) chicks, and to collect eggs for hatching in an incubator in connection with further behavioral studies (*Amer. Nat.*, 95:245-247. 1961). A few notes about the island and gull colony, taken incidental to our study, may be of interest.

The island consists primarily of saltmarsh, with *Spartina* and needlegrass predominating, and has only a strip of dry beach on its western side at the usual high tide. On June 12, Dr. Gilbert Gottlieb accompanied us to the island; that day we estimated approximately 1000 pairs of gulls which appeared to be nesting. The gulls did not nest uniformly throughout the island, but congregated in subgroups of 20 to 100 pairs. The nests were generally built on "rafts" of marsh grass and drift materials which had apparently been piled up by high tides.

Few other birds inhabited the island. Royal Terns nested in small numbers at the northern end, and Sharp-tailed Sparrows occurred sparsely throughout the areas visited. Other species observed included Black Skimmers, Fish Crows, and a Clapper Rail. Of particular interest was a single adult Herring Gull (*L. argentatus*) observed sitting on pilings on the eastern side of the island; presumably the same individual was seen there on June 4 and 19. Since the Herring Gull is extending its breeding range southward, possibly this was a "pioneer." Unfortunately, during the summer of 1961 I was on duty in Europe with the U. S. Navy and could not visit the colony to see if Herring Gulls were present. Likewise, I was unable to see if Laughing Gulls renested at Green Island in 1961, after the obliteration of the colony by high tides in 1960 (*Chat*, 24:98. 1960).

The colonies on Gull and Green islands are the northernmost discovered south of the Chesapeake Bay. The large colony on Gull Island may be the primary source of Laughing Gulls seen during the summer as far north as Norfolk, Virginia.

I am grateful for assistance in locating the colony from Dr. and Mrs. Harry Wells, Dr. Thomas Quay, and Mr. Verde Watson, and for help in the field rendered by Dr. Gottlieb.—JACK P. HAILMAN, *Department of Zoology, Duke University, Durham, North Carolina, January 25, 1962.*

Flight of the Short-eared Owl.—"I was particularly fascinated by the hovering flight of the Short-eared Owl, similar to the Osprey or Sparrow Hawk, which I could find cited only in Bent (*Life Histories of North American Birds of Prey,* 1938). Most writers comment on the moth-like flight, which is true; however, the hovering first drew our attention to the bird which I at first classed as a Sparrow Hawk. Mrs. Norwood said it was too big for a Sparrow Hawk, and we then started to chase the bird down in earnest. We saw two of them, on both the evening of Jan. 4 and 5, from about 5:15 PM, until it got too dark to see. They were hunting among the dunes of Garden City point (Horry County, S. C.) and we saw that the hovering, as stated in Bent, occurs when they sight possible prey. We did not see them during the broad daylight although the literature mentions that they do hunt during the day."—JOSEPH R. NORWOOD, *Charlotte, N. C., Jan. 12, 1962.* (Hovering by the Short-eared Owl is mentioned, but not dwelt upon, in *Natural History of the Birds of Eastern and Central North America,* Forbush and May, 1939, p. 276. The foregoing account is taken from a personal letter.—*Dept. Ed*)

A Saw-whet Owl at McClellanville, South Carolina—The following account of the near capture of a Saw-whet Owl (*Aegolius acadicus*) was told to me on December 30, 1961, by Robert D. Edwards of Ardea, McClellanville, South Carolina.

Mr. Edwards was walking on a street in the village of McClellanville on December 12, 1961, when he saw a very small owl on the ground before him. It was sitting upright, obviously alive, and he assumed that it was stunned. As he walked up to it he slipped off his jacket with the idea of capturing it. When he was almost over the bird it turned its head and looked squarely at him, and he saw at once that it was a Saw-whet Owl. He spread his jacket to drop it, but the owl suddenly flew into some thick shrubbery at the edge of the street, disappeared, and he was not able to find it again.

This observation brings to mind the capture of a Saw-whet Owl at Effingham, S. C., by E. C. Clyde in the previous December (*Chat,* **25**:17, 1961). This tiny owl is considered a casual or rare winter resident in the coastal and lower Piedmont regions of the Carolinas.—B. RHETT CHAMBERLAIN, *Wadmalaw Island, S. C., January 19, 1962.*

More Vermilion Flycatchers in South Carolina.—A letter dated November 30, 1961, from E. O. Mellinger at the Savannah River Refuge (S. C.) reads, in part, as follows: "Mrs. Olga Thyberg of Springfield, Mass., found a Vermilion Flycatcher [*Pyrocephalus rubinus*] on the Refuge on Nov. 17, 1961. A number of parties have come since then and seen the bird. It was still here on the 28th., and it is probably around now. It stays near our bathhouse. I believe the bird to be a first year male, as there is a strong hint of red on the crown, the breast is like that of a female." Mr. Mellinger subsequently reported in mid-January that the bird had been seen up to, but not after, January 4. In the winter of 1958-1959 a Vermilion Flycatcher appeared at the refuge and remained for several weeks (*Chat,* **23**:37, 1959).

On January 5, 1962, Mr. and Mrs. E. A. Mattheissen, visitors from Connecticut, watched a male Vermilion Flycatcher for about three-quarters of an hour near the boat landing at the Santee Gun Club, at the northern end of Charleston County. Mr. Mattheissen discussed his surprising find by telephone with E. Burnham Chamberlain and commented upon the striking brilliance of the bird.

These observations seem to constitute the third and fourth appearances of the Vermilion Flycatcher recorded for South Carolina. A specimen was taken for the Charleston Museum in 1956 (*Chat,* **20**:19, 1956).—B. RHETT CHAMBERLAIN, *Wadmalaw Island, S. C., January 20, 1962.*

A Record in 1960 for the Scissor-tailed Flycatcher in North Carolina.—The note by Greg Massey in the September, 1961, issue of *The Chat* (p. 69) prompts me to send the following record:

On June 13, 1960, my wife and I observed a Scissor-tailed Flycatcher (*Muscivora forficata*) sitting on a telephone wire about one mile north of Pea Island Refuge headquarters building. We had a fine look, as we parked directly underneath and across the road from the bird. Although I possessed a North Carolina collecting permit at the time, the bird was on a refuge and I did not feel that collecting it was desirable.—KENNETH C. PARKES, *Carnegie Museum, Pittsburg, Penn., December 18, 1962.* (This record raises to five the number of Scissor-tailed Flycatchers recorded in North Carolina. The bird was removed from the Hypothetical List in 1956 when Robert Wolff took a specimen for the State Museum. That bird also was found perched on a wire. [*Chat*, **20**:60, 1956].—*Dept. Ed*).

The Barn Swallow Migration at Long Beach, North Carolina.—Long Beach, Brunswick County, North Carolina, forms part of the southern side of Cape Fear. The coast at this point lies in an east-west direction, facing south to the ocean. North of the beach itself is a strip of low dunes and salt marsh that is altogether between two and four hundred yards wide; inland to this is a forest of pine and oak.

In late August and early September many swallows migrate through this area, flying westward just above the dunes and marsh. About 93 per cent of these are Barn Swallows (*Hirundo rustica*), 5 per cent are Bank Swallows (*Riparia riparia*), and the remainder are Tree Swallows (*Iridoprocne bicolor*). I watched these flights in 1959 and again in 1961.

In the early morning the swallows course back and forth just above the sea oats and marsh grass, more intent on feeding than migrating. Gradually their movement becomes more and more westward until there is a stream of scattered individuals and small flocks flying mostly over the marsh and some over the dunes and beach at a level just above the grass to a height of fifty feet. They continue to feed as they pass, and occasionally one will turn and swoop back to catch an insect. A few swallows come southwards, from over the pine woods, cross the marsh and beach and continue over the ocean for a hundred or more yards; then they swing right and fly westward gradually angling back to the land. The number of individuals passing one point usually remains fairly constant until mid-afternoon, when it increases rapidly to a peak about a half-hour before sunset. This increase appears to be a result of the birds' flying more swiftly and constantly in one direction, with less feeding. The swallows disappear about sunset, but I have never seen any sign of their roosting site.

I estimated the number of swallows passing through Long Beach by making counts at intervals during each day of all swallows passing a point during a five minute period. On an average day about twenty swallows passed in each five minute period during most of the day, the number increasing to about a hundred in five minutes in the late afternoon, making an estimated total of 4800 swallows passing during the day. On a peak day, August 29, 1961, the count varied around 120 per five minutes for the morning and early afternoon, rose to 300 per five minutes at 3:30 PM, and reached a peak of 600 per five minutes for almost an hour before sunset; estimating from these counts, about 31,000 swallows passed on this day. Flights were poor on rainy and stormy days with a southeast wind. Heavy flights occurred on days following a rainy spell and declined to average numbers when a weak cold front passed over the area.

The behavior of the swallows suggests that the birds fly southward until they reach the coast, when they turn westward to follow it. Through Long Beach, therefore, must pass all the swallows that have come through the Cape Hatteras area plus all those which have reached the coast in the 160 miles stretch between Cape Hatteras and Cape Fear.—JAMES T. TANNER, *University of Tennessee, Knoxville, Tennessee, November 22, 1961.*

Robin Roost Near Chapel Hill, North Carolina.—Just at the beginning of the new year a giant robin roost was discovered nine miles from Chapel Hill on the Harbison farm in Chatham county. The birds occupied a pine thicket with an undercover of honeysuckle vines on a hillside covering between 30 and 40 acres. At first 90 per cent of them were robins (northern form) with some admixture of redwinged and rusty blackbirds and starlings, and a few cedar waxwings and cowbirds. In a few days the proportion of blackbirds and starlings became much larger. The latter arrived in compact flocks and kept to themselves, even on the roost.

The roostward flight began shortly after 4 PM and was kept up till nearly 6 o'clock. Various estimates placed the number of birds at somewhere between 100,000 and 500,000. It was difficult to make a count because the birds arrived in masses from all points of the compass, some flying low and others high. Just before sundown the robins came from the west in streams and rivers, flying so low as barely to miss the heads of spectators. An odd thing was the almost total absence of robins meantime in the town of Chapel Hill. Last year the Christmas bird count showed only three robins in the urban district.

On arrival the robins did much roost-hopping and visiting from twig to twig, meanwhile maintaining a chatter which at a distance sounded like the roar of a passing train. Just before total darkness fell the entire tract, as if at a signal, became suddenly silent. There have been four other robin roosts in the Chapel Hill area beginning with 1937 when a pine thicket was occupied eight miles north of town, but the present one is much the larger in area and number.—PHILLIPS RUSSELL, *Chapel Hill, N. C., January 14, 1962.*

Red Crossbills at Brevard, N. C.—An item in the December, 1961, issue of *The Chat* (p. 92), written on September 5, recorded the presence of a number of Red Crossbills at Blowing Rock, N. C., from August 22 through Sept. 2. At least two birds, a male and a female, were still present at the same site in the Gage's yard on October 22, when they were watched at length with binoculars and a 30 X Balscope by Mary and Fred May and Margaret and Rhett Chamberlain. The elevation here is about 4200 feet.

The same article also mentioned the occurrence of a crossbill near Brevard. Data on that observation follows: On August 13, 1961, E. Milby Burton, Director of the Charleston Museum, vacationing at Lake Kanuga, saw "with amazement" a male and female Red Crossbill perched on a low wire over a roadway. The birds were just overhead and he could easily see the crossed bills and color pattern. The elevation at Lake Kanuga, which is located a few miles from Brevard, Transylvania County, is approximately 3000 feet. This is a low altitude for Red Crossbills in mid-August in North Carolina. The few recorded summer observations in the state have been confined to elevations of near 5000 feet.—B. RHETT CHAMBERLAIN, *Wadmalaw Island, S. C., January 10, 1962.*

Harris' Sparrow in Upper South Carolina.—A Harris' Sparrow (*Zonotrichia querula*) appeared at the feeding station of Mrs. Edgar N. Woodfin at Gramlin, Spartanburg Co., South Carolina, on January 5, 1962. The bird was feeding with White-crowned Sparrows (Mrs. Woodfin has these every year) and the markings corresponded exactly with the drawing by Peterson of the adult bird except that the cheeks were buffy instead of white. The large size of the bird attracted Mrs. Woodfin's attention; she identified it and called me. I was fortunate enough to get there in time to see it at two different intervals, feeding on the ground with the white-crowns. A watch is being kept for its return.—MRS. CAROL DAVIS, *1744 Hillcrest Blvd., Spartanburg, South Carolina, January 7, 1962.* (A telephone conversation with Mrs. Woodfin on January 22 revealed that the bird was still present and that it had been seen at irregular intervals daily since she first found it. Eighteen or more visitors have seen it, among them were John O. Watkins of Spartanburg and Jay Shuler of Greenville, the latter succeeding in photographing it. No specimen has been recorded from South Carolina. Burleigh took a single bird in western North Carolina in 1933.—*Dept. Ed*).

Lincoln's Sparrow at North Wilkesboro, North Carolina.—Six Lincoln's Sparrows (*Melospiza lincolnii*) were seen on November 10, 1961 at North Wilkesboro. The fine streaking of the breast, buffy band across the breast, and contrastingly striped crown were all noted. The birds were seen in characteristic habitat—a shrubby field through which a small stream ran, and with a shrubby swamp close by. The observer was familiar with Lincoln's Sparrow in Vermont, a few individuals being seen during migration. It was a rare bird there, however, and many seasons passed without one being seen.

Much confusion reigns regarding the name. The bird was not named for either Abraham Lincoln or the late Frederick Lincoln of the U. S. Fish and Wildlife Service. It was described and named by Audubon for a rather obscure man named Thomas Lincoln who accompanied him to Labrador. Mr. Lincoln went out with his gun one day while there and brought in the bird which Audubon named Lincoln's Sparrow.

Once while in Vermont, I heard the song, quite loud and reminding me of both the House Wren and Purple Finch.—WENDELL P. SMITH, *North Wilkesboro, N. C., December 22, 1961.*

NEWS AND COMMENTS

Christmas and Spring counts—Once again in this issue Rhett Chamberlain has laboriously and ably compiled the many separate reports for the "Christmas Count—1961." For many years he has kindly performed this task for the CBC, as well as preparing the Spring Counts, these appearing in the September issues. We extend our gratitude to Rhett for these services, and regret his decision to turn these tasks over to someone else.

In the future, compilers of Christmas and Spring counts should send their reports directly to the Editor of *The Chat*. Compilers are urged to adhere closely to the established formats already published in *The Chat* for these counts. So that the various publication deadlines can be met, Christmas Counts must be in the hands of the Editor by January 15 and Spring Counts by June 1.

Ducks and Geese—According to a recent account released by the Associated Press, the U. S. Fish and Wildlife Service has reported a significant decrease in the numbers of ducks and geese along the Atlantic Flyway. In general, the duck population is down seven per cent from last year, with Mallards being down by 25 per cent. Drought conditions on the breeding grounds were believed to be responsible for the decline in geese. Both Canada and Snow geese have declined in this flyway, as have Whistling Swans.

CBC Winter Field Trip—The winter field trip of the Carolina Bird Club was held at Lake Mattamuskeet, the National Wildlife Refuge, in eastern North Carolina on January 12-14, 1962. Due to inclement weather (freezing rain, sleet, and snow) only about a fourth of those who had made reservations were able to attend. By Friday night only eleven had registered. Eight more arrived on Saturday boosting the register to nineteen. Those nineteen braved subfreezing temperatures, snow, and ice to observe the birdlife. The canals and the lake itself were frozen over with only an occasional pot hole free of ice. It was quite an experience in the deep south to see Canada Geese, Whistling Swans, and ducks of various species sitting around on a lake of ice.

Personnel from the Wildlife Refuge and Audubon Society assisted by furnishing transportation and acting as guides for the small group; morning and afternoon trips yielded 78 species of birds. Deer, rabbits, and muskrat were also sighted. There were approximately 180,000 geese and 58,000 ducks on the reservation. For over 30 years this refuge has been the winter home for migrating ducks and geese.

During the night sessions two movies were enjoyed: one on the identification of ducks, and one depicting a year's span in the life of the bob-white. Each movie brought out the importance of conservation. The highlight of the Saturday night session was a talk by Harold Peters, research biologist with the National Audubon Society, who is now studying the Bald Eagle, to determine the present number of active nests in the United States and to learn facts relevant to its population decline. Mr. Peters is soliciting the aid of those interested in conservation of wildlife to seek out the eagles' nests in their localities, to send information to him or the Audubon Society in order to prevent duplications in the count, and to keep watch on the nests often enough, especially during the breeding season, to determine if young are reared, and any information relevant to their survival (also to note over a three-year period if the nests are used again). He urged that the locality of the nests be kept secret from the general public.

Also on the agenda at this session was a discussion of the proposal for the Air Force to use the area adjacent to the Wildlife Refuge as a bombing range. The necessity of providing a bombing range was recognized, but there were more "cons" than "pros" in regard to having one in this particular area. Bombs could cause forest fires, and the dangers to wildlife near the Refuge and to a nearby recreation area were emphasized. Individuals should write their congressmen and senators advising briefly *why* they oppose the use of this area as a bombing range.

Those attending the winter field trip came from Atlanta, Georgia, Columbia, S. C., Raleigh, High Point, Winston-Salem, and New Bern, N. C., and Alexandria, Virginia.

The Annual Business meeting, which is also the 25th Anniversary of the club will be held in Raleigh, N. C. March 23-25, 1962. A special program is being planned emphasizing ornithological research with a minimum of time devoted to field trips. MRS. EMMA V. WALKER, *Secretary, Carolina Bird Club.*

BOOK REVIEWS

Bird Study. Andrew J. Berger. 389 pages. 1961. John Wiley and Sons, Inc., 440 Park Ave., South, New York, N. Y. $9.00.

Occasionally someone will ask me to recommend a good bird book which presents the subject of ornithology in terms that both the layman and beginning student can understand. Here is one of these well-written books. Many people will recall that Dr. Berger was co-author with the late Dr. Josselyn Van Tyne in writing *Fundamentals of Ornithology,* but some thought this latter book was too technical for most readers. For some people that objection might have been valid, but, according to the jacket appearing on the present book, *Bird Study* is "geared to an elementary course in ornithology for liberal arts students. . . . [It] is also an ideal guide for those who deal with birds as a profession or as a hobby." So it is evident that Dr. Berger has wisely prepared this book in the hope of reaching a wide audience.

The book is excellently illustrated with fine photographs and clear, legible charts and diagrams. Many of the photographs are of nesting birds and were taken by Samuel A. Grimes. Among the subjects discussed in the eleven chapters are bird habitats, behavior, field identification, courtship and nest building, and conservation. Dr. Berger has presented each of these subjects in an elementary fashion, and yet he has not sacrificed any scientific accuracy. Scientific terminology, incidentally, is held at a bare minimum, so that anyone interested in and acquainted with birds should be able to comprehend the text material.

Finally, in the back of the book there are several useful appendices. General references are given as well as selected references for each of the chapters. There is an alphabetical list of common and scientific names for many birds.—DAVID W. JOHNSTON.

BRIEFS FROM THE FILES

Gannet, about 50, 3 miles offshore from Murrell's Inlet, S. C., Oct. 13, Mrs. Ellison D. Smith; over 100 close in at Wrightsville Beach, N. C., Oct. 21, Mrs. Dorothy Earle. • **Green Heron**, 1, Nov. 21, Charlotte, N. C., Lee Jones; 1 on private lake in Cabarrus County, N. C., Nov. 29, Mrs. J. H. Lovell, Jr. • **Yellow-crowned Night Heron**, several still present at Magnolia Gardens, Dec. 9, Theodore A. Beckett, III. • **White Ibis**, 1 immature, Litchfield Beach, S. C., Oct. 7, the William G. Cobeys. • **Snow Goose**, 2, feeding at Bear Island Refuge, Colleton Co., S. C., Nov. 19, B. R. and E. B. Chamberlain, *et al.;* 1 at Lake Murray, S. C., Nov. 23, Robert Overing. • **Blue Goose**, 2 at Lake Murray, feeding on shore, Nov. 23, Robert Overing. • **Fulvous Tree Ducks**, heaviest influx known, on both Carolina coasts. To be reported at end of winter. • **Common Goldeneye**, a female studied at length and reported in detail, Concord Lakes, Cabarrus Co., N. C., Dec. 28, Mr. and Mrs. Shuford K. Peeler. • **Bufflehead**, 1 at North Wilkesboro, Nov. 18, Wendell P. Smith. • **Oldsquaw**, 1 male, 1 female, Ft. Fisher, N. C., Nov. 24, Maurice Barnhill. • **Bald Eagle**, 1 immature, followed flying from North River Bridge eastward for four miles, Dec. 20. Possibly the same bird seen again Jan. 3, at Davis, N. C., Eugene B. Pond. • **Long-billed Curlew**, 1 on mudflats at Yacht Club Basin, Edisto Beach, S. C., Nov. 25, J. Fred Denton; 1 near mouth of Savannah River, Sept. 24 and 25, Ivan Tomkins. • **Pectoral Sandpiper**, 2 at Hartwell Dam, Anderson Co., S. C., Aug. 15, Mrs. R. C. Tedards. • **American Avocet**, 1 watched feeding at Bear Island Refuge, S. C., Nov. 19, B. R. and E. B. Chamberlain and party; the bird seen at Pea Island, May 23, 1958, and included in our December, 1961, "Briefs," had a distinctly "pinkish-tan" head and neck, the John R. Gatewoods. • **Common Tern**, several at Lake Murray, Sept. 16, Mrs. R. C. Tedards. • **Black Skimmer**, over 500, Murrell's Inlet, Oct. 7, the W. G. Cobeys. • **Yellow-billed Cuckoo**, 1 late at Brinkleyville, Halifax Co., N. C., Oct. 8, Thomas E. Street; 1 at Charlotte, Oct. 11, Lee Jones. • **Black-billed Cuckoo**, 1 at Brinkleyville, Oct. 5, Thomas E. Street; for the record: 1 at Pea Island Refuge, in the bushes near Bodie Island Museum, June 13, 1960, believed to be a stray, and not nesting, Dr. and Mrs. Kenneth C. Parkes. • **Chimney Swift**, some at Anderson, S. C., through Oct. 9, Mrs. R. C. Tedards. • **Western Kingbird**, 1 near Bodie Island lighthouse, Sept. 23, Paul W. Sykes, Jr.; 1 at Pea Island Refuge, Nov. 24, Robert L. Pyle; 1 at Edisto Beach, Nov. 26, J. Fred Denton. • **Yellow-bellied Flycatcher**, 1, Sept. 15 and 16, Charlotte, Lee Jones. • **Red-breasted Nuthatches**, well spread over most of the Carolinas; first at North Wilkesboro, Sept. 14, Wendell P. Smith; and Pea Island, Sept. 23, Paul W. Sykes, Jr. • **Catbird**, 1, late in Cabarrus County, N. C., Nov. 22, Mr. and Mrs. J. H. Lovell. • **Solitary Vireo**, 1, extremely early at Effingham, S. C., Oct. 19, E. C. Clyde. • **Cape May Warbler**, 2 at Charlotte, Oct. 8, the J. R. Norwoods. • **Wilson's Warbler**, 1 at North Wilkesboro, Sept. 9 and Oct. 26, Wendell P. Smith. • **Bobolink**, 60 or more in flock at Wilmington, Sept. 23, Greg Massey. • **Baltimore Oriole**, apparently plentiful over the whole area; 1 immature at Edisto Beach, Oct. 10, John H. Dick and Alexander Sprunt, Jr. • **Scarlet Tanager**, 1 at Wilmington as late as Nov. 28, Mrs. Polly Mebane. • **Pine Siskin**, strangely scarce during the fall; 1 or 2 at Winston-Salem, Oct. 23, and 1, Dec. 4, David W. Johnston. • **Lark Sparrow**, one was watched carefully at Whalebone Junction, Dare Co., N. C., Aug. 6, Mr. and Mrs. Jack M. Potter.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1961 unless otherwise shown.*

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

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Supporting	$5.00	Affiliated Club	$2.00

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The activities of the Club and the coverage of *The Chat* will grow in amount and quality as increased funds become available. Prompt payment of dues and the securing of new members are vital contributions open to everyone.

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THE CHAT

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June, 1962

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Editor: David W. Johnston, 1955 Faculty Drive, Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Least Bittern imitating a stump. Notice how the contours of the bird conform to the contours of the stump. Photographed in Santee Swamp, S. C., by Walter Dawn of Woodside, N. Y.

PRESIDENT'S PAGE

Just now I begin to realize that I am named as President of the Carolina Bird Club for 1962-63. There are numerous details to hammer out, committees to appoint, and programs to consider. It is proper to pause here and pay tribute to the officers and others who have served the Club so well and unselfishly over the past twenty-five years. I hope to maintain the record they have set.

Coming to the State Museum as a geologist some forty years ago I necessarily had to become a naturalist. To find answers about our flora and fauna, especially birds, was a duty imposed. There was a native interest in birds, in part fostered by the 1919 book, *Birds of North Carolina*. The Museum Director, H. H. Brimley, with his brother, Dr. C. S. Brimley, and Dr. T. Gilbert Pearson were the authors. These same authors wrote another edition in 1942.

This interest prompted the organization of the Raleigh Bird Club when the birds were migrating in the spring of 1937. There were a score of members. A month later a State group of 60 met in Raleigh and organized the North Carolina Bird Club. There were 101 Charter Members by the deadline of May 6, 1937. These represented all sections of the State.

Later, when South Carolina was ready to organize, a Carolina Bird Club was the obvious answer. In this case there was strength in numbers, when publications and general services are involved. The distributed costs are more moderate in a larger group. The Club is now receiving recognition as one of the largest in the country, and we have the room to grow in both bird studies and potential membership.

Dr. John H. Grey bravely fathered the first *Chat* in March, 1937. His office was the West Raleigh Presbyterian Church and his equipment was a typewriter and a mimeograph machine. In 1941 the *Chat* achieved printing. Other able Editors have followed, and the publication has gathered prestige. University and other institutional libraries are seeking copies for binding. This challenges us to use every opportunity and resource to have an even better *Chat*.

Furthermore, we need to come up with some practical plans to build strength and teamwork in the local Clubs. I seek ideas and experiences from members for challenging the potentials. Some ideas will be forthcoming. Be generous in passing them to me.

Sanctuaries: There is the problem of keeping these meaningful as well as the neat road markers. Two small areas (Southport and Ocracoke nesting colonies) are being worked on as sanctuaries. Are there other possibilities?

Finally, I appreciate the honor and accept the responsibilities. As the pioneers said "I hope to leave the woodpile by the wilderness shelter in better shape than I found it." HARRY T. DAVIS

SMITHSONIAN INSTITUTION JUL 9 1962

THE CATTLE EGRET IN WAKE COUNTY, NORTH CAROLINA

BY JAMES F. PARNELL, ROBERT F. SOOTS, AND JOHN P. HARDISTER, JR.

The first Cattle Egret (*Bubulcus ibis*) recorded in North Carolina was taken in 1956 in Bladen County by Dave Adams (*Chat*, 20:38, 1956). Since that time several other observations of the species have been made in North Carolina, but these were, with one exception, in the Coastal Plain. The single record for the Piedmont was by Bachman in 1958 near Henderson, North Carolina (*Chat* 22:69, 1958). Insofar as the authors can determine, the following account is the second record of the Cattle Egret away from the Coastal Plain of North Carolina.

On April 11, 1962, at 5:12 PM, the authors sighted seven Cattle Egrets at Lake Raleigh near the southern city limits of Raleigh. This lake is an eighty-one acre city reservoir. The egrets approached the lake from the northeast and flew directly to a flooded stand of willows (*Salix nigra*). Here they were observed at length, through 7 X 50 binoculars, and all field marks were noted. Observation was maintained until the birds moved into the lower branches of the willows and were apparently settling to roost.

Upon our return to the area at daylight the following morning twenty-eight Cattle Egrets were observed on the roost. Apparently twenty-one additional birds had arrived after our departure the previous evening. The entire flock left the roost at 6:15 AM and flew out of sight in an easterly direction. All twenty-eight egrets were found about an hour later in a large pasture on the State Hospital Dairy Farm one mile east of the roosting site. They were feeding in a fescue (*Festuca* sp.) pasture among a herd of cattle.

According to a report given to Dr. T. L. Quay by the herdsman at the Finley Hog Farm, a large flock of white herons (Cattle Egrets) appeared there early on the morning of April 10. They fed among the swine for a while and then left the farm about midmorning. The farm personnel at the State Hospital Dairy Farm reported first seeing the egrets there on the afternoon of April 10. The Finley farm is about three miles south of the State Hospital farm. It seems likely that this represents the initial arrival of this flock of egrets, as no earlier sightings have been reported.

On April 13 a report of seven additional Cattle Egrets was received. These birds were located at the North Carolina State College Dairy Farm near the western city limits. This farm is approximately five miles from the State Hospital Dairy Farm, where the flock of twenty-eight egrets had been seen earlier in the day. We immediately visited both areas and confirmed the presence of both flocks. The discovery of a second flock initiated a more intense search, and later in the afternoon three additional Cattle Egrets were located, approximately ten miles south of Raleigh at the Greenview Dairy Farm. This brought the total number of egrets observed to thirty-eight. Of these, thirty-three were determined to be adults, as evidenced by the characteristic buff-colored markings. Five lacked any buff color and were considered immature.

The large flock of egrets at the State Hospital Dairy Farm fed, at various times on April 13 and 14, both among the herd of cattle and in sections of the pasture where there were no cattle. The group of seven egrets at the State College Dairy Farm was seen feeding with several cows in a small fenced lot only fifteen or twenty yards from the cow barns. The small flock of three egrets at the Greenview Dairy Farm was also observed feeding among cattle.

The roost of the flock of twenty-eight birds at Lake Raleigh was in a stand of willows, fifteen to twenty feet tall, which extended as a peninsula approximately one-hundred yards into the lake. At the site of the roost the trees were in standing water. When coming to roost the birds perched initially in the tops of the willows, and then moved slowly down to roosting positions four to eight feet above the water. The entire flock of twenty-eight roosted at this site on the nights of April 11 and 12. On the 13th seven birds used this roost, and on the 14th only three egrets were counted there. No egrets used the roost on the night of the 15th, but on the 16th two birds were again found there. No observations were made on the 17th or 18th; however, on the 19th a single Cattle Egret was again seen at the roost. This was the last observation of these Cattle Egrets in Wake County.

The roosting sites of the two small flocks of Cattle Egrets were not found, and neither flock was relocated after the initial observations of April 13.

The weather pattern during the period of the observations was as follows. On April 10 a cold front passed over the state accompanied by showers and moderate winds. This front was stationary in the Raleigh region during April 11 and 12. This period was characterized by showers on the 11th and clearing on the 12th. April 13 and 14 were clear and unusually cold with moderate to high winds prevailing. On April 15 a weak cold front developed to the west and passed eastward over Raleigh and out to sea by late evening. From April 16 through April 19, the day of the last observation, the weather was dominated by a high pressure system, and generally fair and cool weather prevailed.

It appears that these Cattle Egrets arrived in the Raleigh region on April 10. This was the date of the passage of a cold front through the area, and this apparently caused the unusual stopover of these birds in Wake County. The presence of large dairy farms and suitable roosting sites, coupled with the unusually cold weather of April 13 and 14, were perhaps responsible for the length of their stay.

Zoology Department,
North Carolina State College,
Raleigh, North Carolina,
April 25, 1962.

NOTES ON PELLETS CAST BY A BABY BLUE JAY

By Doris C. Hauser

A baby Blue Jay (*Cyanocitta cristata*) about two weeks old was brought to me for care on July 22, 1961, having been captured early that morning. The behavior of the young bird. and the state of its plumage, with no feather tufts protruding from the sheaths of the tail feathers, suggested that it had just tumbled out of its nest and was found shortly thereafter. My daughter, Lisbeth, prepared a box for the bird, placing pine straw on the floor and a branch of dogwood for a perch. We fed it a mush of cornmeal, bacon fat, and water, using a small paint brush for a tool. Its droppings appeared healthy, and the bird was strong and active.

The following afternoon, Lisbeth brought me a small, firm oval-shaped pellet, studded with iridescent jewel-like flakes, which she had just found in the box. For a moment I was baffled and then wondered if it was possible that baby blue jays might be capable of forming pellets at so early an age.

Donald H. Lamore (*Wilson Bulletin*, 70:381, 1958) disclosed that a "captive immature Blue Jay" had ejected two pellets, a few days apart, composed of mimosa blossoms.

Our baby jay, had apparently manufactured a pellet, and its contents proved to be even more surprising. The iridescent shards were bits of beetle wings, insects such as I had seen parent jays carrying to their young. Also present in the pellet were a few small flat reddish seeds (unidentified).

The real surprise, however, was to find three small sharp-edged pebbles. Two of them were of a flint-like stone, quite flat (less than 1/16 inch thick) and somewhat less than ¼ inch wide or long. The other was a rougher, conical piece of quartz, triangular in shape, which measured about ⅛ inch for each dimension. The presence of these pebbles in the pellet of the bird suggested that parent jays present grinding stones to their nestlings along with food.

Another daughter, Ann, cautioned me to maintain a scientific attitude until I knew that the jay was the author of the pellet, and that it hadn't been accidentally placed in the box with the pine straw. On July 26 another pellet was found, however, this one containing the legs of crickets, which had been added to the bird's diet along with earthworms, only the day before. A third pellet was cast on August 7, shortly before the bird died. This one was of a greenish color and appeared to be composed of pieces of chick scratch feed which the jay had learned to peck up from the floor of its box. All the pellets, like those described by Lamore, were about ½ inch long with tapering ends.

It is possible that many other species of birds give their nestlings grinding stones. Perhaps some readers may be willing to join me in trying to find out.

A brief autopsy, and examination of the gizzard of those nestlings which do not survive in spite of our efforts, might disclose some interesting information on this subject.

309 Sylvan Road
Fayetteville, North Carolina
March 11, 1962.

A LOOK BACK INTO HISTORY REVEALS A NEW SPECIES FOR THE NORTH CAROLINA LIST

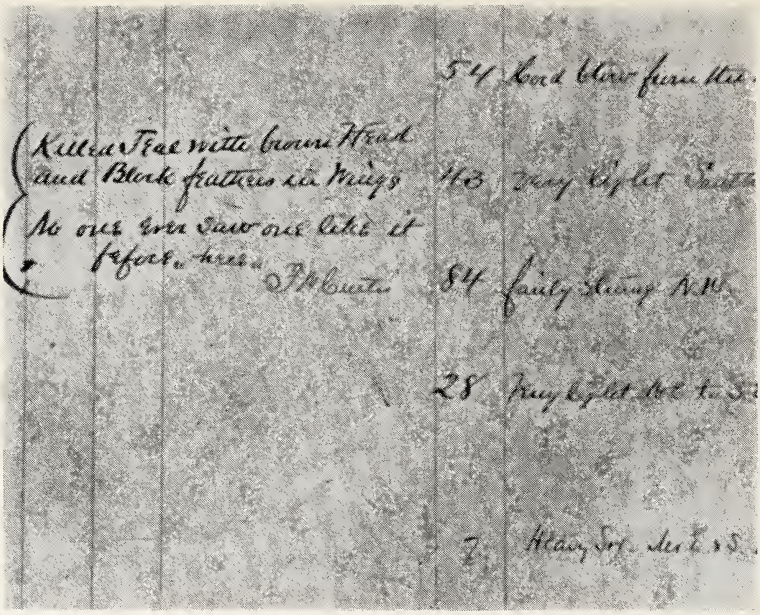
By Paul W. Sykes, Jr.

On February 19, 1961, I had the privilege of visiting the club house of the Swan Island Club, Inc., courtesy of J. M. Wade of Knotts Island, North Carolina. The club house is located on Swan Island, which is two miles southeast of Knotts Island in Currituck County. The purpose of my trip was to identify a species of teal that was mounted and kept in an oak and glass case displayed on the living room wall of the club house. The record of the unidentified bird was brought to my attention by a federal biologist at Back Bay, Virginia.

The Swan Island Club, Inc. is an old established hunt club in Currituck County. Its records date back to 1872, when it was founded. The property of the club includes several miles of ocean front on the outer barrier beach and extends westward through the wax-myrtle thickets and fresh water marshes and creeks into the eastern part of Currituck Sound. In the old days the property was divided into twenty-eight hunting areas. Before each day's waterfowl shooting began each member present drew lots to determine the area in which he would hunt that day. Prior to the passage of the Migratory Bird Law (McLean Act) of 1913, and the Migratory Bird Treaty Act of 1918 (Dana, 1956. *Forest and Range Policy; The World Book Encyclopedia.* Vol. 2, 1950), the season on waterfowl was non-existent. Hunting by club members and guests, most of whom were from the Boston and New York areas, began in late August or early September when the shorebirds were migrating south and continued until early spring when the waterfowl departed for their breeding grounds. At that time there were no bag limits and practically all species were hunted. The club ledger includes the following species taken that are no longer legal game: Great Blue Heron, Whistling Swan, Snow Goose (the Lesser Snow Goose of the Mississippi, Central, and Pacific flyways is now legal game, but not the Greater Snow Goose of the Atlantic Flyway), Bald Eagle, most of the species of Charadriiformes found in North Carolina, Yellow-shafted Flicker, Robin, and Boat-tailed Grackle, to mention just a few. It was not unusual to bag 50 to 100 waterfowl a day per man. The record bag in one day for a club member was 180 birds. The records of the club are quite complete and in some cases are detailed accounts by each member of the day's hunting experiences.

The unidentified bird was found to be an adult male Baikal Teal (*Anas formosa*) (Sykes, *Auk*, 78:441. 1961). This species is named after Lake Baikal in Siberia. The A. O. U. "Check-list of North American Birds," (5th ed., 1957), gives the range of *Anas formosa* as breeding in northern and eastern Siberia and wintering from eastern and southeastern China, Korea, and Japan to India, Assam, and Burma; occurring in the Kurile and Komandorskie Islands in migration. The species is listed as casual in Alaska (since the fifth edition was published there has been evidence of breeding on the coast of Alaska) and recorded doubtfully from Iceland, California, Ohio, England, Switzerland, and Italy.

Upon looking through the club ledger I found that the bird was killed on December 9, 1912, near Crow Island (the old name for what is now Swan Island) by the late F. W. Curtis of Boston. The bird was killed on either Plover Pond or Nigger Island, both of which are just east of Swan Island on the club property. It was not stipulated in the ledger in which area the teal was killed, only that Curtis hunted in both areas on December 9. Mr. Curtis' personal account in the ledger is as follows: "Killed Teal with brown Head and Black feathers in Wings. No one ever saw one like it before here" (see Fig. 1). On the same day the teal was shot, Curtis' bag consisted of 54 other birds: Whistling Swan, 1; Canada Goose, 1; Black Duck, 14; Pintail, 3; Green-winged Teal, 2; American Widgeon, 32;



54 Hard blow from the

Killed Teal with brown Head
and Black feathers in Wings
No one ever saw one like it
before here.
F W Curtis

43 Very light South

84 fairly strong N.W.

28 Very light [illegible] to S

7 Heavy [illegible]

FIGURE 1. L. to R. by columns. F. W. Curtis' personal account of the Baikal Teal, five members total bag for December 9, 1962, and a portion of brief weather comments as shown in the Swan Island Club Ledger.

and Redhead, 1. The unidentified teal was not totaled in the day's bag for some unknown reason; therefore Curtis' actual bag for the day was 55 birds instead of 54 as shown in the ledger.

On a previous page in the Swan Island Club records, it is interesting to note that on December 3, 6 days prior to Curtis' unusual kill, the late Arthur Lyman killed a European Widgeon (referred to as an English Widgeon in the ledger) on Swan Island.

The Baikal Teal was mounted and arranged in an old-style game-mount, *i.e.*, hanging by one foot with the head pointing downward, the body in a vertical position, and the wings partially spread. The bird was enclosed in an oak case with a glass front that had a large oval dome in it to allow space for the bird inside. The bird was mounted by Charles E. Eldon, taxidermist, of Williamsport, Pennsylvania. I removed the glass front of the case to examine the specimen more closely and to take a number of Ektachrome transparencies.

The adult male Baikal Teal is distinctly marked (see Fig. 2). The plumage of the specimen that I examined on Swan Island is in good condition and does not show signs of the colors fading, even though it has been mounted for 49 years (at the time I observed the bird in February, 1961). The plumage, the bill, and the feet show no signs of the type of pigment and/or color fading, wear, or damage that is often prevalent on birds that have been in captivity. In many cases, however, a bird might live through one or more molts after its escape. The forehead, the crown, and the occiput are dark brown. The malar and auricular regions are tan, separated by a black line from the eye to the gular region and the chin, both of which are also black. A white line extends horizontally from above the eye back around the head. A crescent, which is metallic green except in its

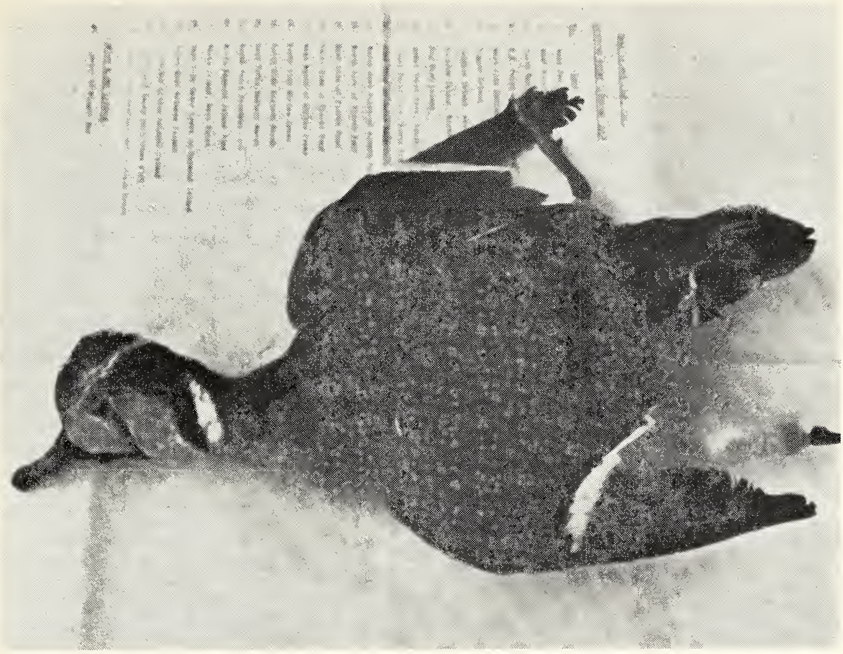


FIGURE 2. The adult male Baikal Teal (*Anas formosa*) shown removed from its case. A portion of the damaged leg is visible. The photograph was made from a color print which was made from an Ektachrome transparency. The items listed at the top of the picture are hunting areas on the Swan Island Club property.

lower portion which is black, extends from the eye back to the nape and then down to the side of the neck. A white stripe borders the rear edge of the crescent from the nape of the side of the neck. There is a vertical white line on the side just forward of the wing. A small portion of this line is visible on the left side in Figure 2. The dorsal portion of the body, the tail, and the wings, except the speculum, are brown. The speculum has a narrow orange band, a wedge shaped dark metallic green band, a wedge shaped black band, and a white trailing edge. In Figure 2, the orange band appears as a faint gray streak and the dark metallic green band appears black. The ventral side of the body is a light buff color with small dark spots on the breast and the anterior portion of the abdomen. There is a vertical white line on the rear portion of the flanks. The under tail converts are black. Whereas the plumage of the teal is in good condition, the feet and bill have been damaged. The left leg, from which the entire weight of the bird is suspended when mounted in the case, has pulled loose, showing the wire support that runs through the leg connecting it to other wire supports inside the mounted bird and some of the cotton stuffing. The extremities of the right foot have been damaged by fungus. The tip of the upper mandible was damaged when the left leg came loose. This put the full weight of the bird on the bill and pressed it against the glass dome of the case.

There are only a handful of records for this teal in the United States outside of Alaska. Practically all of these records are of birds believed to have escaped from captivity (A.O.U. "Check-list," 1957; Brady and Choate, 1961, *Audubon Field Notes*, 15:315; Hatter, 1960, *Condor*, 62:480; Moffitt, 1932, *Condor*, 34:193; Swarth, 1932, *Condor*, 34:259; Trautman, 1935, *Ohio Dept. of Agric. Bull.*, 1:1-16; Trautman, 1940, *The Birds of Buckeye Lake, Ohio.* In the 1920's and early 1930's the Baikal Teal was one of the commonest waterfowl species imported into the United States from Asia (Swarth, *ibid.*). There is little reason to believe that the N. C. specimen was an escape because its occurrence in 1912 was prior to most imports of this species into this country and the area was far removed (in 1912) from any park or zoo along the Atlantic Coast. The Baikal Teal is a new bird for the North Carolina List. A bird, seen at Cape May Point, New Jersey from March 19 to 30, 1961 (Brady and Choate, *ibid.*), and believed to be an escape, is the only other known record of this species on the Atlantic Coast to date.

1522 Lafayette Blvd.
Norfolk 9, Virginia,
April 7, 1962.

SUN-BATHING IN BIRDS*

BY DORIS C. HAUSER
Fayetteville, North Carolina

Liz Roley's "Nature Notes" column in the *Leader-Post* of January 28, 1961, interested me with its description of a Black-billed Magpie (*Pica pica*) sunbathing. In the middle of the Qu'Appelle Valley, Liz Roley (Mrs. Elizabeth Cruickshank) observed a magpie fly "purposefully across the valley" to a sheltered ledge on an earth embankment facing south into the sun. The ritual performed by the bird as he took his dust or sand bath was described as follows: "He arched his back feathers until they were perpendicular spears. He made sidewise somersaults. He curved his body, his feathers pointing in all directions making him look like a spiked ogre. A series of acrobatics which followed made us hold our breath—we were sure he would fall to the ground below. For a while he remained perfectly still, his breast pressed into the sand, his beak wide open. Then abruptly, as though he had forgotten a part of the rite, he began to thoroughly dust his wings and tail. At last, he seemed satisfied to rest, comfortable and at peace. Finally, as the sun left his niche, he flew in bounding flight across the field to the dead trees along the river, calling as he went."

The careful reporting of Mrs. Cruickshank points up three characteristics of a typical incident of voluntary sun-bathing: it is premeditated and purposeful; it requires sun and protection from breezes sufficient to trap the heat; and it is apparently a therapeutic measure, affording a sense of well-being to the bird.

Sun-bathing is a form of bird behaviour which has received little attention in print until very recent years. Observation and study now indicate that it is one of several forms of pseudo bathing which are closely allied. Many of the postures and physical activities employed in the water bath are duplicated and exaggerated in sun-bathing, and dust-bathing, smoke-bathing, heat-bathing and "anting." In addition, there are other postures and activities which are peculiar to these forms.

In pseudo bathing, it appears to be the presence of heat which acts as the trigger and brings forth the "acrobatics" and assumption of postures both singular and unexpected in a bird. Any single incident may be a combination of one or more forms.

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* Reprinted from *The Blue Jay*, June, 1961, pp. 81-82.

Although birds may be capable of discerning the therapeutic value of sunshine and heat, it is more possible that they indulge in the pseudo bathing activities because there is an element of pleasure involved. Observers have often mentioned the quality of "ecstasy" expressed by an "anting" bird. A sun-bathing bird, outstretched on a patch of hot sand appears to be in a coma but apparently enjoys it because it repeats the sunbath, with intermittent interruptions for preening sessions, over and over again.

On many occasions, a Taylor candy thermometer has registered 140°F. at a site where dozens of birds, of different species, were gathered to sunbathe. A favoured sun-bathing site may be used repeatedly for years and though some birds may sun-bathe in solitude, it as often becomes a community affair.

One's first sight of a sun-bathing bird gives an immediate impression that the bird is suffering and dying. All its body feathers are raised high, the wings outstretched and tail fanned, and the head tilted to one side, with the bill wide open.

The bird may be ignorant of the beneficial results of the sun's irradiation but the postures it assumes in sun-bathing positions make certain that the feathers, which form a barrier to the body's absorption of Vitamin D, are raised and parted, and the skin exposed. The birds change their positions in relation to the sun so that as much as possible of the body surface is exposed to its rays. Some species of birds roll over on one side, fanning out a wing so that its underside is uppermost; some throw themselves onto their backs exposing the entire ventral surface to the sun.

It seems possible that a by-product of sun-bathing, in some species, may be the accelerated manufacture and release of the fine oil of the preen gland which is used for dressing the feathers. Careful attention to the plumage, with frequent recourse to the preen gland, has been observed to be an integral part of the sun-bath of many birds. Studies have also indicated, though not conclusively, that birds may gain some benefit at each preening from the involuntary ingestion, by swallowing, of oil, applied to the feathers during the earlier preening session, which may have absorbed some Vitamin D from the sun. It has also been suggested that exposure to the sun may assist the bird in ridding its plumage of ectoparasites.

Midwinter sun-bathing records are far less common in my files than those of the more temperate months of the year and I have no other observations recorded in the presence of snow, or at an air temperature as low as 39°F. (Elizabeth Cruickshank, pers. corresp.) It is often the unusual incident which gives new clues to an understanding of behaviour, just as an expanding file of more common-place records help to show a pattern which, in its own way, is important.

New species added to the list of sun-bathers, new locations and new postures, may all be important and helpful in defining the significance of sun-bathing in the life of the bird.

EDITOR'S NOTE: Doris C Hauser (Mrs. Roscoe Hauser, Jr.) is an amateur ornithologist whose recent study on sun-bathing in birds (1957. *Wilson Bulletin* 69:78-90) has attracted considerable attention. Sun-bathing is a habit of birds which has been observed by nearly all who have an interest in watching birds, but there has been no previous extensive study of the subject. Still, the main basis of her research has been direct observations of birds in the field, an opportunity which is available to all of us. Her closing comments are appropriate: "The sun plays a vital part in the life-cycle of birds as it does for every living thing. It is hoped that this paper will draw attention to the subject and that observation and study of the effect of the sun on birds will follow."

B. RHETT CHAMBERLAIN
CBC HONORARY LIFE MEMBER

B. Rhett Chamberlain was born and raised in Charleston, South Carolina. His early interests in birds and the out-of-doors were, fortunately recognized and nurtured by the well-known naturalists, Arthur T. Wayne and F. M. Weston. Service in World War I took Rhett Chamberlain as a young man first to the Mexican Border and then to Europe. Following graduation from Rensselaer Polytechnic Institute in 1925, he spent some time with General Electric in Schenectady, New York. In 1927, "getting back to the Carolinas," he came to Charlotte, North Carolina with the Southern Bell Telephone and Telegraph Company, where he stayed until retirement from professional life in 1960.

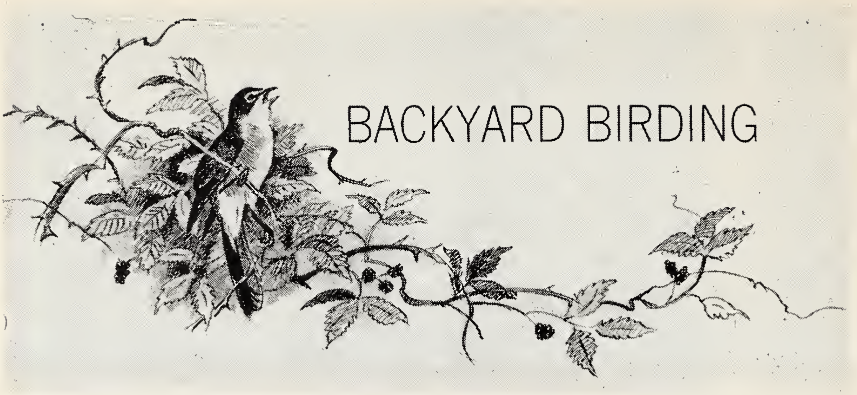
Since first becoming a member in 1942, Rhett Chamberlain has given continuously of his great talents and energies to the advancement of the Carolina Bird Club. He has served on the Executive Committee nearly every year, in many different positions and capacities. Under his leadership as President during 1948-1950, the North Carolina Bird Club and the South Carolina nature clubs were joined effectively, with new constitution and by-laws, as the Carolina Bird Club, an action of vision and lasting importance to ornithology in the Carolinas. His total contributions to the business, organizational, and field trip activities of the CBC are too numerous to mention individually.

The General Field Notes Department, with Rhett Chamberlain as Editor, has literally been the backbone of *The Chat* since 1951. From 10 to 25 individual accounts or records on distribution, numbers, migration, habitats, nesting, and behavior are published in this section in each issue, some by Chamberlain himself and all going through the necessary careful evaluation and editing provided by Chamberlain and his editorial board. The steady quality and dependability of "General Field Notes," more than anything else, has given *The Chat* its national standing as a journal of ornithology. As Field Notes editor, Chamberlain also edits in *The Chat* each year the "Christmas Census" and the "Spring Count" records, both very sizeable tasks. The General Field Notes Department also includes the valuable "Briefs For The Files" section.

On the national level, Rhett Chamberlain has been editor since 1949 of the "Southern Atlantic Coast Region" in the *Audubon Field Notes* magazine. This "Region" includes North Carolina, South Carolina, and Georgia, exclusive of the higher mountains, and provides extensive coverage of the numbers, distribution, and movements of the birdlife for each of the four seasons of the year. The "Region" reports are contributions of paramount scientific importance, and Chamberlain's tenure in this position is unusually long and distinguished, bringing considerable worthy attention and recognition to the Carolinas ornithologically.

In addition to his many editorial works and other publications listed above, Rhett Chamberlain has written at least 19 lead articles in *The Chat*, as follows: "Early Bird Prints and Bird Lore" (March, 1945); "Bachman's Sparrow Nest Found at Charlotte," (May, 1945); "Nesting Records of Grasshopper Sparrows from Charlotte and Vicinity," (November, 1945); "Bachman's Sparrow, A Portrait," (January, 1948); "North Carolina's Type Forms," (March, 1948); "The Editors of 'South Carolina Bird Life'," (March, 1950); "Mount Pleasant and the Low Country," (November, 1951); "Evening Grosbeaks in the Carolinas," '(June, 1952); "Check List of Common Names for Use in the Carolinas," (June, 1953); "Safety Factor in a Hanging Nest—Yellow-throated Vireo," (June, 1954); "The Preface to Catesby's Natural History," (March, 1955); "A Look at Ten Years of Census Taking," (March, 1955); "Purple Sandpipers on Parade," (June, 1955); "Safety Factor in a Hanging Nest—Acadian Flycatcher," (September, 1957); "A Note on the New A. O. U. Check-List," (December, 1957); "Using the New 'Check-List' for Sight Records in the Carolinas," (June, 1958); "Evening Grosbeaks Fly South Again," (September, 1958); "Review of 'Georgia Birds'," (September, 1958); "Review of 'Birds of Maryland and the District of Columbia'," (March, 1959). The papers on the safety factor in hanging nests are especially noteworthy, being based on careful experimental analysis; this is a field of research worthy of further development.

Rhett and Margaret Chamberlain are now home again, on Wadmalaw Island, near Charleston, S. C., with their own woods, beach, boat, dock, salt marsh, and mullet pond. Rhett, Jr., a graduate of the School of Engineering, Duke University, lives in Raleigh. Son Norman, with new Ph.D. degree from Johns Hopkins University, is on the staff of the Marine Biological laboratory of the College of Charleston. Twin brother E. B. Chamberlain, professional naturalist and former Curator of Vertebrate Zoology at the Charleston Museum, lives in Charleston. Busier than ever with birds and natural history, B. Rhett Chamberlain deeply merits his election as the Carolina Bird Club's second and only living Honorary Member For Life, in recognition of his eminence as ornithologist and his service to the Carolina Bird Club.—T. L. QUAY, *Chairman, Committee on Honorary Life Members, Raleigh, N. C., March 17, 1962.*



BACKYARD BIRDING

This has been a wonderful spring for birding. We have had more species in central South Carolina than we have seen in many years. Mrs. Clyde Sisson came down from Columbia, and we made a Spring Count the last Wednesday in April. We found more species than had ever been included in one count since we have been making them. But there was one distressing incident of that day. While at lunch on our back porch, we remarked that we had not seen the chickadees feeding their young in the box in the yard. Inside the box we found the four young all dead! I would guess they must have been about a week old, for we had been watching the parents feed them. I had used dust on our roses just once. The box is on a post just below the roses. Could this have been the cause?

Has anyone any evidence of such deaths occurring? Last year, this same thing happened, except that one adult bird was also dead in the box. We need to be careful in the use of dusts and sprays, and let us share the knowledge uncovered by our experiences.

Mrs. Jean McCoy of Greensboro, N. C., sent in this tale of an almost starling-proof feeder, and the behavior of the birds that enjoyed it.

"In March, 1961, I put out a temporary feeder. I used an aluminum foil pie pan about four inches in diameter. Four holes were made in the rim, fine wire attached at each hole and drawn up to a peak two inches above the pan. A single wire was attached to the peak and to a slender branch of a sweet gum tree. The finished feeder was suspended six and one-fourth inches below the branch. In the pan was kept uncooked "pudding" made of drippings, peanut butter, raisins, dry oatmeal, and other ingredients that might be handy—graham cracker crumbs, cookie crumbs, corn meal, nut meats. Seventeen species are fond of this mixture. Two others have eaten it, but only in an emergency.

A Brown-headed Nuthatch inspected the feeder right away, but it was the next day before a bird came to eat and then it was a Mockingbird. For almost a month this bird had the pudding to itself. Of course, it dwarfed the little pan, and its first problem was one of balance. Some individuals learned to balance perfectly, some never learned to do it without fluttering constantly, others settled the question by placing only one foot on the pan and clinging to one of the diagonal wires with the other. One bird, even in this position, constantly beat the air with one wing. The second problem was one of space. Nearby branches left little wing-room. One individual solved this by slipping sideways off the overhead branch, holding one wing out for balance until its feet could grip the pan. One gave a spring away from the overhead branch until both wings had room to flutter a time or two and bring it to the feeder. Others hopped from place to place, eying the pan, and finally simply fell upon it from above.

Chickadees discovered the feeder next and, from the first, perched on the edge without difficulty. The Catbird was another expert, as were most Pine Warblers and Summer Tanagers. Cardinals liked the pudding very much in the summer, but when cooler weather came they deserted it for sunflower seeds. The adults never became accustomed to balancing on the pan, but the young birds took to it readily. Once, three of them got on it at one time and ate calmly while the feeder bobbed and swung. Later in the season, one immature male studied the pan from a distance, made a flying dash at it, and missed it by a beak-tip.

The Blue Jay also liked the pudding during warm weather. It watched the other birds eating, seemed to know it was missing something good, and tried hard to find a way to get to the pan. At last, perching on a twig four inches to one side, it was able to stretch its neck far enough to get a bite. Another jay tried the stretch, couldn't reach the pan, and almost pitched over on its head. It finally teetered awkwardly on the edge for one bite. Later, the preferred method was to cling to the overhead branch, stretch down for a big bite, pull part-way back, then fly to the ground to swallow. They used up a lot of energy this way. In July, a starling tried the stretch technique, but didn't succeed

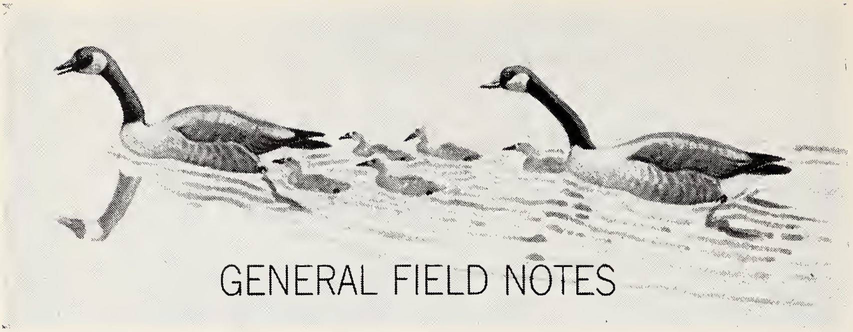
The Myrtle Warbler usually hovered beside the pan to eat, making gestures with its feet as if it might perch, occasionally landing for an uneasy second or two on the rim.

The Red-bellied Woodpecker, used a method all its own. It perched on the twig beside the pan, swung itself under so it was upside down with its head toward the pan, twisted its head around, and ate over one shoulder. The Downy Woodpecker clung to the rim by its toes, causing the pan to tip up vertically so the bird was on its back. The feeder would swing back and forth but the woodpecker just curved its tail in tighter and kept eating.

The star of the show was the Baltimore Oriole, an immature male spending the winter with us. The first day, it tried balancing and fluttering on the rim; then clinging to the rim and curving its tail underneath; or stretching from the branch above; but before the day was over it was perching on the nearest twig, pulling up the wire with its bill and holding the pan to the twig with one foot. Several weeks later the wire was dispensed with—the oriole simply reached over, caught the edge of the pan and brought it up to the twig."

Rhett Chamberlain wrote on April 23, 1962: "From the Log of Critter Rest.—This morning at about 10 o'clock I watched a small flock of Tree Swallows swarming about the upper part of a bare 45 foot utility pole across the creek from our yard on Wadmalaw Island. Occasionally a swallow clung momentarily to the side of the pole. These observations would have had no special meaning for me except for one thing. The wire that this pole had supported for many years was removed in 1960. When we moved here in March of that year and saw the spring migrants come by, one of the sights was the close packed and ever changing string of hundreds of Tree Swallows on the electric wire crossing our creek. Hordes of the birds fed over the fields and salt marshes and many of them used that wire between forays. Later in the summer our electric supply line was improved and rerouted and the single wire crossing the creek was pulled down. The pole was left up because it stands in salt marsh and is not worth the cost of salvage. During the southward swallow flight that fall, great swarms of Tree Swallows milled about that pole and over the creek and marsh where the wire had been. We were interested but not too surprised. The time had been so short since the wire disappeared. But during both spring and fall flights of 1961 the lost perch was looked for. At each succeeding time there were fewer birds. This morning about two dozen are here again. About that many still seem to remember. Will some of them look for the wire again this fall? Perhaps a few will. Swallows and memories drop off."

A. R. FAVER, *Department Editor, Eastover, S. C.*



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Common Eider Taken in South Carolina.—On February 12, 1962, Richard Hutson collected in Charleston Harbor the first known Common Eider (*Somateria mollissima*) to be found in South Carolina. Probably the same bird had been seen by Mr. M. L. Cates, Jr., of Spartanburg on January 12, 1962, who at the time did not realize its rarity and did not report the occurrence. Mr. E. Milby Burton and Mr. Peter Manigault also observed the bird in the harbor in early February but attempts to secure it for the Charleston Museum at that time failed. A series of pictures taken through telephoto lens was obtained, however.

The bird (Charleston Museum number 62.17.2) measured: length, 572 mm.; wing, 264 mm.; tail, badly worn; bill, 38.5 mm. It weighed 4 lbs. 7 oz., was an immature male, and was somewhat fat with its crop and gizzard about one-half full of one-inch mussels.

Subspecific determination reveals that the bird is *S. m. dresseri* rather than *S. m. borealis*. The frontal processes of the bill are rounded and divergent as opposed to pointed and parallel, and the length of the bill including the processes, is greater than three inches. *Borealis* rarely comes as far south as Massachusetts, whereas *dresseri* has occasionally been observed as far south as North Carolina.—EDWIN L. BLITCH, III, *5 Oakdale Avenue, Charleston, South Carolina, April 12, 1962.*

Long-billed Dowitchers on the Upper North Carolina Coast.—F. G. Scheider and I observed four Long-billed Dowitchers (*Limnodromus scolopaceus*) in the Great Marsh, which separates Knotts Island from the mainland of Currituck County, North Carolina, on March 10, 1962. Three birds were seen flying. The single note, which is perhaps the best means of distinguishing this species from *L. griseus* in the field, was uttered several times before we lost sight of them. About a mile away a lone bird was seen feeding on the mud flat that was created by the grazing of the wintering population of Snow Geese. The barring of the flanks, the noticeably long bill, and the grayish coloring of this bird were carefully noted through a 25x scope at 30 to 40 yards. We also heard this bird utter the single note several times upon being flushed.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk 9, Virginia, April 2, 1962.*

The Whooping Crane in South Carolina—A Resumé—According to *South Carolina Bird Life* (Sprunt and Chamberlain, 1949, 190-191) the Whooping Crane (*Grus americana*) has been recorded in the state only twice: (1) "A specimen was taken on the Waccamaw River about 1850 which was in the Charleston Museum when Wayne wrote of it in 1910." (2) "Audubon refers to a bird kept in captivity by Simon Magwood, near Charleston." Both of these occurrences are discussed in some detail by Wayne (1910:33). Since Audubon was known to have confused Whooping and Sandhill cranes, the record is open to question. In his detailed account of this species' distribution, Allen (1952:8) remarked: "Mark Catesby arrived in Charleston, South Carolina, in May 1722. In the course of his travels, there occurred a dramatic meeting between him and an unnamed Indian. The native presented Catesby with "the entire skin" of a large white crane. Realizing that here was something entirely new, Catesby made a drawing of the head and neck, and described it fully in his *Natural History*. The Whooping Crane (as *Grus americana alba*) was in this manner introduced to the world. It is the opinion of Alexander Sprunt, Jr. (*in. litt.*) that this particular bird was killed at the mouth of one of the South Carolina rivers, the Santee, Waccamaw or Edisto. We can only speculate. . . . It is not exactly clear, from this confused testimony, whether Catesby considered that the species occurred in South Carolina or not. He does not appear to have observed them there, or seen any specimens, dead or alive, other than the skin mentioned. Much later (in 1850) their presence, on the Waccamaw River in South Carolina, was confirmed by a specimen (Wayne, 1910 . . ." In Catesby's original (1731) edition, however, he does not mention any specific rivers in the Carolinas but suggests the presence of the birds in Georgia or Florida.

Attention should be called to yet another record, though it is not original with this reviewer. That intrepid pioneer ornithologist, Alexander Wilson, recorded the species in South Carolina in 1809 while he was travelling by horseback from Wilmington, North Carolina to Georgia. Brewer (1840:549) quotes Wilson as follows: "On the 10th of February, I met with several near the Waccamau River, in South Carolina. . . ." This same occurrence is expanded by Cantwell (1961:175-176) in his incisive biography of Wilson: "At almost every plantation he was entertained, sold another subscription, was kept overnight, and so delayed that he was still proceeding along the Waccamaw River on February 10, for on that date he notes whooping cranes flying over it— the tallest and most stately species of all the feathered tribes of the United States," he wrote. They were rare birds even in 1809, a thrilling sight—formidable, Wilson called them—and their virtual disappearance could be foreseen. The cranes flew in single file with a low and heavy flight, only a little above the water. At times they uttered a loud, clear piercing cry, audible two miles away. Shy and vigilant, they were hard to shoot, and sometimes could be seen rising spirally in the air to great height, as if to reconnoiter the country and select the least inhabited as their own. At these times the confused sound of their voices, reaching earth when the birds were almost out of sight, resembled that of a pack of hounds in full cry."

Not only does this record of Wilson contain some interesting life history notes on the species, but it also provides the only precise date of occurrence for the Whooping Crane in South Carolina.

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David W. Johnston, *Department of Biology, Wake Forest College, Winston-Salem, North Carolina, April 5, 1962.*

Hudsonian Godwits on the South Carolina Coast?—On September 1, 1961, Mr. Tedards and I were at Hunting Island (Beaufort County, South Carolina) for the week-end where we spent some time looking over the marsh and mud flats adjacent to the Harbor River. On this date, we were observing a huge concentration of shorebirds in which we had identified some common species, plus a few Marbled Godwits. Then I noticed a flock of forty-nine birds which, though godwits, were certainly not Marbled. Some of these birds had breasts so red that they looked bloody and the upper tail coverts were snow white. This was quite noticeable on the birds which had their backs to me. When they raised the wings, the white was most evident. I remarked to Mr. Tedards that I had never seen any white on the Marbled Godwit.

Some of the birds were in the fall plumage, grayish-brown on the back, and white underneath with no barring. We observed the birds, which were resting, for fully thirty minutes, with and without binoculars. The red breasts and white tail coverts were very noticeable even without glasses.

Unless the status of the Hudsonian Godwit (*Limosa haemastica*) has recently changed, I realize that, to say the least, this was a most unusual observation.—MRS. R. CONNOR TEDARDS, *Route 2, Anderson, South Carolina, November 21, 1962.* (The status of the Hudsonian Godwit is undergoing a change. It remains on the Hypothetical List for South Carolina since no specimen has been recorded for the state. The slim eastern fall migration is normally made well off-shore, down the Atlantic Ocean. In very recent years a few birds have been found on the upper and middle Atlantic coast, presumably displaced by prolonged east winds. During September and October of 1961, about twenty birds were observed at scattered locations in Delaware and Maryland [*Audubon Field Notes*, 16:17, 1962]. An examination of the weather bureau records for Charleston and Wilmington, North Carolina, shows continuous easterly winds during the last half of August, 1962. These facts, along with Mrs. Tedards' reputation as a careful observer, prompt us to publish this sight record.—*Dept. Ed.*)

A Spring Record for the Saw-whet Owl in South Carolina—On March 30, 1962, R. A. DesPortes, of Columbia, South Carolina, recovered a Saw-whet Owl (*Aegolius acadicus*) that had collided with his car on the highway some 20 miles south of the city. Mr. DesPortes saw that the bird apparently was in good shape except for the loss of one eye, and, rather than release it in that condition, he took it home. A letter from him, dated April 9, inquired about disposition of the disabled bird where it would be cared for. I suggested the Junior Museum at Greensboro, North Carolina.

This occurrence of the Saw-whet Owl just below the fall line in middle South Carolina is unique in two respects. It appears to be the first *spring* occurrence of this tiny owl in either of the Carolinas, and the first time it has been found twice in the same winter season in South Carolina.

South Carolina dates of occurrence prior to the present one are: December 12, 1961; December 3, 1960; and November 12, 1952 (*Chat*, **26**:20; **25**:17; and **17**:26, respectively). Of the six earlier known occurrences, four are for November; one is for December; and one is for February, and that one was in 1899 (*South Carolina Bird Life*, Sprunt and Chamberlain, 1949: 313-314).

While the increasing frequency of reports of this owl and other species in South Carolina and elsewhere is attributable to some extent to the increased interest and knowledge of birds, there is supporting evidence that Saw-whet Owls moved toward our territory in unusually large numbers last fall. In *Operation Recovery*, as many as fifteen of these owls were trapped and banded at the Island Beach, New Jersey station between September 25 (early) and October 29, 1961. (*Audubon Field Notes*, **16**(1):17).—B. RHETT CHAMBERLAIN, *Wadmalaw Island, South Carolina, April 14, 1962.*

Crippled White-throated Sparrow Returns to Tryon, North Carolina—This is the third winter in a row that a crippled White-throated Sparrow (*Zonotrichia albicollis*) has returned to our feeders at Tryon, N. C., along with numerous other white-throats. We know it is the same cripple because of the nature of its disability: its right leg is held straight out to the right, the difficulty apparently being in the thigh. The bird seems not to bend its knee and, as far as we have been able to notice, it does not use its toes. It feeds on the ground and never flies up into the feeding boxes as the other birds do, but we have seen it hop onto low bushes nearby. Apparently the bird is a female and always seems as healthy and large as the other white-throats. None of the other white-throats bothers it, and it seems to hold its own from season to season. We have not seen it now for a couple weeks, and believe it is with other white-throats down in the brush by the river. We have often wondered if this cripple has ever been seen by anyone in the north during the summer. NORME D. FROST, *Box 271, Tryon, N. C., March 8, 1962.* (A letter from Mr. Frost dated April 8, states that the sparrow was back at his feeders on that day.—*Dept. Ed*).

Some Spring Transients Near Elkin, North Carolina.—There is a secluded lake near Elkin, North Carolina, which has a good shoreline for shorebirds and good feed for ducks. Located in Wilkes County, it is exposed to broad open pastures on the northeast and bordered on the southeast by fairly heavy woods. It was built about ten years ago and in recent years it has attracted an unusual number of birds for this part of the country. Between March 26 and June 1, of 1961, I was able to get the following list of migrants.

	First date	*Only date*	*Last date*	*Maximum number*
Redhead		March 26		1
Blue-winged Teal	April 2		April 26	9
American Widgeon	April 3		April 14	3
Bufflehead	April 4		April 8	2
Scaup (sp.)	April 7		April 15	2
Ruddy Duck	April 7		April 8	1
Common Goldeneye		April 8		1
Upland Plover	April 9		April 14	2
Spotted Sandpiper	April 10		June 1	5
American Woodcock		April 14		1
Gadwall	April 15		April 23	3
Osprey		April 23		1
Lesser Yellowlegs	May 3	May 3		1
Least Sandpiper	May 4		May 7	1
Red-breasted Merganser	May 16		May 18	2

In the above list, the Red-breasted Merganser is late and the occurrence of the Osprey is unusual. Also, the occurrence of the Upland Plover is but the third recorded in the Elkin area. The other records are: April 20, 1952, one bird; and October 14, 1956, two birds. A Pied-billed Grebe, a very young bird with hardly any tail, appeared on the lake on June 24, 1961, and a Solitary Sandpiper was seen at nearby Ronda, April 30, 1961. Later in the year, eight Tree Swallows came over the lake on the late date of October 22; a Vesper Sparrow was there as early as August 31; and a Black Vulture, the first in a good many years, appeared on October 15.—EARL M. HODEL, *137 Westover Drive, Elkin, North Carolina, January 23, 1962.*

Tower Casualties at Columbia, South Carolina in 1961.—In 1960 I reported the results of partial coverage of casualties at the WIS transmitter tower near Columbia, South Carolina (*Chat*, 25:18-19, 1961). In the fall of 1961 together with my sister, Mrs. R. C. Tedards, a more extensive study of the casualties at that tower was made. Our findings are tabulated here.

Casualties around Columbia were light this fall due to generally favorable weather. Thorough searching at WIS from September 20 to November 30 produced only 76 individuals and of these, 59 were picked up on the morning of November 7. Over one-half of the species found were warblers or sparrows. The largest bird was an Eastern Meadowlark. All were picked up under or at the southeast and southwest sides of the tower. They were weighed on postal scales. Some have been prepared as study skins and the rest have been frozen. Overall measurements of length and wingspread were made. They are not included in the table. The most surprising find was the Lincoln's Sparrow, reported in detail elsewhere in this issue.

October 5, 1961. Local weather: A cold front accompanied by strong NW winds, 10 to 15 knots; broken cloud cover, ceiling 1000 feet; rain earlier in the day, clearing by 5 PM.

	weight	*sex, plumage*	*condition*
Catbird	—	—	fragment
Wood Thrush	—	—	fragment
Black-throated Blue Warbler	¼ oz.	male, high plumage	very fat
Chestnut-sided Warbler	¼ oz.	— immature	fat
American Redstart	—	male, very high plumage	very fat

October 9, 1961. Local weather: clear, variable light winds, ceiling unlimited.

	weight	*sex, plumage*	*condition*
American Redstart	—	male, high plumage	very fat
Red-eyed Vireo	—	male, adult	fat

November 7, 1961. Local weather: a cold front moved across the central portion of the state before dawn, accompanied by winds NE, 6 to 10 knots; heavy overcast; ceiling 500 to 600 feet, ground visibility less than three miles; wind dropped to calm at 6 AM and there was a heavy ground fog.

	weight	*sex, plumage*	*condition*
Yellow-bellied Sapsucker	2 oz.	female, adult	fat
Winter Wren	⅛ oz.	—	fat
Robin	3 oz.	— adult	very fat
Hermit Thrush	1⅛ oz.	— adult	very fat
Golden-crowned Kinglet	⅛ oz.	male, adult	very fat
Ruby-crowned Kinglet	⅛ oz.	male, adult	fat
" " "	⅛ oz.	" "	"
" " "	1/16 oz.	" "	"
" " "	⅛ oz.	" "	"
Orange-crowned Warbler	¼ oz.	female, adult	very fat
" " "	¼ oz.	male, adult	very fat
" " "	¼ oz.	" "	" "
Myrtle Warbler	½ oz.	male, adult	very fat
" "	½ oz.	— immature	very fat
" "	½ oz.	"	fat
" "	½ oz.	"	fat
" "	⅔ oz.	male, adult	very fat

	number	*weight*	*sex, plumage*	*condition*
Bay-breasted Warbler		¼ oz.	—	very fat
Pine Warbler		½ oz.	female, adult	very fat
Eastern Meadowlark		2½ oz.	— immature	very fat
” ”	(2)	2¾ oz.	— adult	very fat
” ”	(3)	4 oz.	— adult	very fat
Savannah Sparrow	(1)	¾ oz.	—	—
” ”	(2)	¾ oz.	female, adult	very fat
” ”	(3)	⅔ oz.	—	” ”
” ”	(4)	¾ oz.	male, adult	” ”
” ”	(5)	⅔ oz.	” ”	” ”
” ”	(6)	¾ oz.	” ”	” ”
” ”	(7)	⅔ oz.	” ”	” ”
” ”	(8)	¾ oz.	female, adult	” ”
” ”	(9)	¾ oz.	—	” ”
” ”	(10)	⅔ oz.	male, adult	” ”
” ”	(11)	⅔ oz.	— ”	” ”
Grasshopper Sparrow		¼ oz.	male, adult	fat
Sharp-tailed Sparrow		½ oz.	male, adult	very fat
Vesper Sparrow		1 oz.	male, adult	very fat
Field Sparrow	(1)	⅓ oz.	male, immature	very fat
” ”	(2)	½ oz.	” adult	” ”
” ”	(3)	⅓ oz.	” ”	” ”
” ”	(4)	⅓ oz.	” ”	” ”
” ”	(5)	⅓ oz.	” ”	” ”
” ”	(6)	⅓ oz.	” immature	” ”
” ”	(7)	⅓ oz.	” ”	extra fat
” ”	(8)	¼ oz.	” ”	very fat
Fox Sparrow	(1)	1⅛ oz.	— adult	fat
” ”	(2)	1¼ oz.	— ”	very fat
Lincoln’s Sparrow		½ oz.	— immature	fat
Swamp Sparrow	(1)	½ oz.	male, adult	very fat
” ”	(2)	½ oz.	” ”	” ”
” ”	(3)	½ oz.	female, adult	” ”
” ”	(4)	½ oz.	male, adult	” ”
” ”	(5)	½ oz.	— ”	” ”
” ”	(6)	½ oz.	— immature	” ”
” ”	(7)	½ oz.	— adult	” ”
Song Sparrow	(1)	¾ oz.	female, adult	very fat
” ”	(2)	¾ oz.	” ”	” ”
” ”	(3)	¾ oz.	— ”	” ”
” ”	(4)	½ oz.	— immature	fat
” ”	(5)	¾ oz.	— adult	very fat

November 12, 1961. Local weather: cloudy; no cold front passage; wind calm; brief early morning showers.

	weight	*sex, plumage*	*condition*
Parula Warbler	Not weighed.	An adult male	very fat
Field Sparrow	Not weighed.	An adult male	fat

The partial remains of 2 Myrtle Warblers and a Field Sparrow were found. They might not have been fresh.

November 14, 1961. Local weather: ceiling 500 to 700 feet; moderate WSW wind; showers.

	number	*weight*	*sex, plumage*	*condition*
Chipping Sparrow	(1)	¼ oz.	male, immature	very fat
" "	(2)	¼ oz.	" "	" "

November 16, 1961. Local weather: unbroken overcast, ceiling 400 to 600 feet; wind moderate, southerly.

		weight	*sex, plumage*	*condition*
Solitary Vireo		⅔ oz.	male, adult	very fat
Savannah Sparrow	(1)	⅔ oz.	— "	fat
" "	(2)	⅔ oz.	— "	"

November 19, 1961. Local weather: heavy overcast, ceiling 500 to 700 feet; wind NNE, 7 to 10 knots; light rain.

	weight	*sex, plumage*	*condition*
Golden-crowned Kinglet	⅛ oz.	male, adult	very fat
Starling (partial)	—	" "	—

—Mrs. Ellison D. Smith, *1626 Shady Lane, Columbia, South Carolina, and* Mrs. R. Connor Tedards, *Route 1, Brown Road, Anderson, South Carolina, November 30, 1961.*

Lincoln's Sparrow, a New Species for South Carolina.—On the morning of November 7, 1961, while recovering birds at the base of the 1600 foot WIS television tower in Kershaw County, South Carolina, I picked up a sparrow bearing a superficial resemblance to an immature Swamp Sparrow, except that the streakings on the underparts were very narrow and sharply defined and it lacked the "red" on the wings. When the casualties of the day were measured, weighed and frozen, the suspect bird was frozen separately to be given further attention.

On January 18, 1962, my sister, Mrs. R. C. Tedards, and I sorted the frozen birds in order to sex and discard the ones that were not in good enough condition to skin. After more thorough research on the sparrow in question, we tentatively decided that it was a Lincoln's Sparrow. Inasmuch as we could find no record for this sparrow in South Carolina and as neither of us was personally familiar with it in the field, we decided to skin it immediately and send it to Charleston for identification. Accordingly Mr. Burnham Chamberlain agreed to examine it for us. Mrs. Tedards prepared the skin and mailed it to Mr. Chamberlain. He concurred in our tentative identification and forwarded the skin to the United States Fish and Wildlife Service at Washington, D. C. Subsequently Dr. John W. Aldrich found the bird to be an immature Lincoln's Sparrow of the eastern race (*Melospiza lincolnii lincolnii*). This is the first known occurrence of Lincoln's Sparrow in South Carolina, and the skin is in the Charleston Museum.—Mrs. Ellison D. Smith, *1626 Shady Lane, Columbia, South Carolina, April 16, 1962.*

Albino Evening Grosbeak at Chapel Hill, North Carolina.—While we were at breakfast on April 13, 1962, an albino Evening Grosbeak (*Hesperiphona vespertina*) appeared at our feeder. It was not pure white, but the palest possible "pearl gray" with no trace of black or of any other markings whatsoever except for the ghost of a golden band about the neck, so pale as to be almost invisible. The bill was bone white, and the eyes normal in appearance. Although I watched it for some time from a distance of not more than twelve feet, I could not determine its sex. It was with a small flock of normal grosbeaks, and apparently, despite its unusual color, was accepted by the others as a normal member of the group. Unfortunately, I had no film in my camera that morning and, since I have loaded it, have not seen the bird again.

This white grosbeak has been seen by three or four other people in various localities in the south and eastern portions of Chapel Hill, but I have heard of no one who has photographed it.—Gerald R. MacCarthy, *107 Ledge Lane, Chapel Hill, North Carolina, April 15, 1962.*

Saw-whet Owl Near Chapel Hill, North Carolina in Spring.—On April 9, 1962, while driving along Route 54 at 8:30 PM, about 13 miles east of Chapel Hill in Durham County, North Carolina, I noted a small owl which flew out of a pine grove and swooped downward into the headlights of my car. Immediately I stopped and backed up to where the owl lay dead in the road. It was a Saw-whet Owl (*Aegolius acadicus*), and it was unmarked except for the loss of a few back feathers at the point of impact.

Although there is a record as late as May 29 (1957) for the Saw-whet Owl on Mount LeConte in the Great Smokies (see Tanner in *Migrant* 17: 28, 1957), my record may be unusual in Spring for the Saw-whet in the north-central part of the state.—John K. Terres, *P. O. Box 571, Chapel Hill, North Carolina, April 17, 1962.* (See a spring record for South Carolina in this issue.—*Dept. Ed*).

NEWS AND COMMENTS

Annual Meeting—The Silver Anniversary meeting of the Carolina Bird Club was held on March 23-24, 1962, in Raleigh, N. C., where the club was organized 25 years ago. The Raleigh Club was host and went "all out" in making the meeting a memorable occasion. On Friday evening there was a business session followed by an Executive Committee meeting.

A field trip Saturday morning was followed by a buffet luncheon, after which Dr. Merrill Spencer presided at a scientific papers session. Six well presented papers on different phases of ornithology held the attention of the audience.

A short business session followed the papers session in which the slate of officers received from the Nominating Committee was adopted. Also adopted was the recommendation from the Executive Committee to award honorary life membership in the club to Mr. B. Rhett Chamberlain. After a discussion by the membership regarding the awarding of four tuition scholarships to the Audubon Camp in 1962, it was agreed to abide by the Executive Committee's recommendation to wait until 1963 to grant four scholarships.

The Saturday evening dinner meeting was held in the YMCA. After dinner the officers were installed, and Mr. Harry Davis, the President-elect, spoke briefly on the history of the club. Dr. Tom Quay was called upon by President Bristow to present the Honorary Life Membership to Mr. Chamberlain. Former CBC President Robert Overing then presented an illustrated talk on some birds seen and heard in Europe.—Mrs. Emma V. Walker, *Secretary, Carolina Bird Club*

Addresses: A new postal regulation makes it necessary to pay 10 cents each for any Chat that is not delivered because the address is not correct and complete. This is more than the normal postage for Chats and Newsletters for a whole year. This indicates that you can save the Club money and time if you will watch this.

Dues: Two thirds of our 1300 members have paid their 1962, and some for 1963, dues. If you have not sent your 1962 dues please do so now. This will save much time and expense that it takes to make up and send individual bills. Your Club needs this kind of support.

Some members living together say "send no Chat," or "only one Chat." With our system it is easier to send Chats to all, but we can easily send the extra Chat to a chosen library, etc., in your name.

BOOK REVIEWS

Birds of the World. Oliver L. Austin, Jr. 316 pages, many col. illus. by Arthur Singer. 1961. Golden Press, New York, N. Y. $14.95.

The first impression on opening this book at random is, "Oh! My!" The illustrations are gorgeous; however, they illustrate the text rather than the text being something to separate the pictures. After a brief general introduction to birds and their evolution, each of the 155 families recognized by the author is discussed. The emphasis is on the living bird. The accounts are sound and trustworthy. There are, to be sure, some matters of opinion on which the author and the reviewer would disagree. This is largely because the author has not hesitated, as indeed he should not have, to bring forward controversial matters.

With this book, Arthur Singer joins the first class bird artists of the present day. It is remarkable how life-like are his portrayals of birds he has not seen in life. His style is clearly his own and not an imitation. The originals are tempera paintings. Every family and most subfamilies are illustrated. Some groups have probably never been shown in color before. The following are noteworthy: tapaculos, asities, *Hypocolius*, bald crow, Cape honeyeater, and plush-capped tanager.

All in all, the book is well worth having as the best account of the birds of the world for the non-professional and there is much in it which will be unfamiliar to many professionals.—CHARLES H. BLAKE.

Birds of the Caribbean. Robert Porter Allen. The Viking Press, 625 Madison Avenue, New York 22, N. Y. 256 pages. $15.00

Aluminum Company of America is to be congratulated for making possible the publication of this large, beautifully illustrated book. One of its aims has been "to add a much needed reference and picture book on the beautiful birds that live . . ." in the Caribbean area. Mr. Allen needs no introduction to this audience, for most readers recall his affiliation with the National Audubon Society, with conservation, and his fine monographs of the Whooping Crane and the West Indian Flamingo.

Since hundreds of species of birds are known to inhabit the Caribbean region, it would be almost impossible to discuss them all in a single volume, so the author has selected about 100 for inclusion in this book. Quite a variety is represented from nearly 50 families, ranging from seabirds (tropicbird and frigatebird) to giant vultures to exotic hummingbirds and parrots to gaudy tanagers and finches. The most striking feature of the book are the sections of color photographs, all species "taken in their natural surroundings by leading bird photographers," such as Cruickshank, Grimes, and Kinne. In some cases, the photographs are so close and clear that one can count the barbs on an individual feather.

The text provides fascinating reading. To begin with, Mr. Allen discusses the history of the Caribbean area, its natural areas (forests, swamps, and islands), and ornithologists dating back even to Columbus. Each species' account covers roughly two pages and contains a variety of statements relating to habitat perference, distribution, nesting, food, and interesting anecdotes. These accounts are not intended to be complete life histories, but brief introductions to the species. At the end of the book, additional data are given for the birds shown in the photographs: local, common names, a description, and range.

If I were anticipating a trip to the Caribbean area, I'd certainly want to carry this book as a companion volume to one of the standard field guides.—DAVID W. JOHNSTON.

The Biosystematics of American Crows. David W. Johnston, 1961. University of Washington Press, Seattle. $3.25.

The crow, genus *Corvus*, is a familiar bird over most of North America. The layman and student recognize major characteristics of this bird. The crow image is the black color, the raucous call, the flocking tendencies, the strong claws and bill, and the belligerence toward enemies.

At the same time, bird students in the Carolinas know that there are differences in crows, in that we have both the Fish Crow and Common Crow breeding here. There are other species with similarities and differences on the North American continent and the Caribbean Islands. In the absence of a comprehensive and "Biosystematic" study, ornithologists had not been in agreement on the species and subspecies of these birds. It continued as a problem group until this author found the opportunity, the encouragement, and the funds for research. More complimentary to the author is that he had the training and ability to do this ornithological work. As the author writes, "It is the purpose of the present analysis to evaluate accurately and correctly the ecologic relationships among the American Crows which form one of these problem groups."

It is beyond the province of this review to detail the procedures, methods, and calculations of the author. Most of this book of 125 pages is concerned with the evidence, the computations, and the documentation.

In summary, (1) the Common Crow *(Corvus brachyrhynchos)* is the crow that is widely distributed through the United States and Canada. In the west are two subspecies, the Northwestern Crow *(C.b. caurinus)* which extends along the Pacific Coast from Alaska to Washington and the Western Crow *(C.b. hesperis)* that ranges from California to British Columbia. (2) The Fish Crow *(C. ossifragus)* is principally a Coastal Plain form of the Eastern and Southern United States. (3) The Mexican Crow *(C. imparatus)* is confined to Mexico with two subspecies. (4) The Cuban Crow *(C. nasicus)* is found on Cuba, the Isle of Pines, and Caicos. (5) The White-Necked Crow *(C. leucognaphalus)* is of Puerto Rico and Hispaniola. (6) The Palm Crow *(C. palmarum)* is of Cuba and Hispaniola. (7) The Jamaican Crow *(C. jamaicensis)* is confined to Jamaica.

Carolina Bird Club members can take some pride in the fact that our "Chat Editor" had the opportunity to use the latest scientific methods in ornithology to analyze completely the "Crow Problem" and to come up with conclusions that are now final answers.

This small book is a valuable reference work for any science library. This is doubly true for students concerned with crows and for students of scientific methods in ornithology.—HARRY T. DAVIS.

BRIEFS FOR THE FILES

Red-throated Loon, over 1000 counted, feeding over the riffles at the mouth of the Edisto River, S. C., March 10, J. Fred Denton • **Brown Pelican**, more numerous at Wrightsville Beach, N. C., this winter of 1961-1962 than during past winters, Mrs. Dot Earle. • **Gannets**, plentiful within easy sight of Myrtle Beach, S. C., one group of about 25 working over a school of porpoises, March 16, Mrs. Ellison D. Smith. • **Anhinga**, 1 in marsh at Clearwater, Aiken County, S. C., December 1-25, 1961, J. Fred Denton. • **Green Heron**, 1, Charlotte, N. C., April 7, Julian Meadows. • **Cattle Egret**, 1, first for Anderson County, S. C., arrived March 29, Mrs. R. C. Tedards. • **Black-crowned Night Heron**, 1 at Seven Springs, Wayne County, N. C., December 2, 1961, R. H. Siler. • **Yellow-crowned Night Heron**, 1 im., at Charlotte, N. C., February 15 and again April 5, thought to be the same individual, Lee Jones. • **American Bittern**, 2 at private fishing lake near Columbia, S. C., found February 2 and still present April 7, Mrs. Ellison D. Smith. • **Wood Ibis**, 1 over marsh at Charleston, S. C., March 5, Mr. and Mrs. I. S. H. Metcalf. • **Fulvous Tree Duck**, 3 feeding at Buxton, N. C. on the Outer Banks, January 27 and 28, J. E. Ames, Jr.; at least 14 killed during the hunting season, 1961-1962, at Davis, Carteret Co., N. C., Eugene Pond; flock of 14 watched at Bear Island Management Area, Colleton County, S. C., January 17, Donald K. Fortenbery. • **American Widgeon**, a large raft with a few scaup resting on the ocean just beyond the breakers at Myrtle Beach, S. C., March 16, Mrs. Ellison D. Smith. • **Redheads**, a huge flock estimated at 500 with about 250 Ring-necked Ducks at Hartwell Dam backwaters, near Anderson, S. C., March 11; 98 Redheads present there, March 17, Mrs. R. C. Tedards. • **Ruddy Duck**, 1 at Concord lakes, Cabarrus County, N. C., February 17, Dr. and Mrs. William Cobey. • **Broad-winged Hawk**, 1, Charlotte, N. C., April 8, Lee Jones, Frank Ramsey. • **Purple Gallinule**, 1 at close range at private lake near Columbia, S. C., April 4, Mrs. Ellison D. Smith. • **Common Snipe**, 17, the largest number ever seen here in one day, March 12, North Wilkesboro, N. C., Wendell P. Smith. • **Purple Sandpiper**, 1 or 2 present December 3, 1961, to March 1, at Wrightsville Beach, N. C., Sam Earle, Greg Massey. • **Great Black-backed Gull**, 2 feeding with Herring and Ring-billed gulls under Texaco dock at Morehead City, N. C., 2 PM, March 10, Hugh Porter and Harry T. Davis. • **Razorbill**, 1 seen within a few feet on sand shoals near Bogue Inlet, Carteret County, N. C., February 14, Eugene Pond. • **Rough-winged Swallow**, first noted at Columbia, S. C., March 22, Mrs. Ellison D. Smith; at Charlotte, N. C., April 1, Lee Jones; and at North Wilkebsoro, N. C., March 26, Wendell P. Smith • **Purple Martin**, first noted at Abbottsburg, Bladen Co., N. C., February 19, and on March 1, 2 males and 3 females present at the gourds there, Charles G. Yarbrough; 1 perched for a short time in yard on Wadmalaw Island, S. C., March 3, B. R. Chamberlain; seen at Charlotte, April 4, Frank Ramsey. • **Fish Crow**, 4 at Raleigh, N. C., March 24, rare, or seldom reported, so far inland, David W. Johnston. • **Red-breasted Nuthatches**, widespread over much of the Carolinas during the winter 1961-1962; 6 at Charlotte, N. C., April 8, Lee Jones and Frank Ramsey. • **Winter Wren**, 1 at Charlotte, N. C., March 25 through April 7, Lee Jones and Julian Meadows. • **Robin**, 1, mostly albino, March 3-March 14 at Winston-Salem, N. C., fed normally with many other Robins on golf course, was reasonably approachable and appeared black and white from a distance, Mrs. Norman Wiggins and many others. • **Eastern Bluebird**, 1, perhaps the event of the winter at North Wilkesboro, N. C., February 24, Wendell P. Smith. • **Blue-gray Gnatcatcher**, 1 in yard on Wadmalaw Island, S. C., March 21, B. R. Chamberlain; 1 at Charlotte, N. C., April 1, Lee Jones. • **White-eyed Vireo**, 2 or 3 heard, 1 seen, February 20 and again February 26, Wadmalaw Island, S. C., B. R. Chamberlain. • **Prothonotary Warbler**, a brilliant male in yard on Wadmalaw Island, S. C., March 28, flew after bumblebee but retreated after a closer view, B. R.

Chamberlain. • **Orange-crowned Warbler,** 1, Charleston County, March 18, watched at length, Edwin Blitch, B. R. Chamberlain, *et al.* • **Parula Warbler,** first noted at Charleston, March 20, the R. H. Colemans. • **Yellow-throated Warbler,** seen and heard on John's Island, S. C., February 28, Mr. and Mrs. I. S. H. Metcalf. • **Redwinged Blackbird,** about 350 wintered at North Wilkesboro, N. C., Wendell P. Smith. • **Baltimore Oriole,** apparently commonplace over both Carolinas during the winter of 1961-1962; 1 female at Riverland Terrace (Charleston, S. C.) feeder January 11, Mr. and Mrs. Francis Barrington; 2 males at a feeder, Wake Forest, N. C., February 15 through 19, Mrs. Neville Isbell; 1 male on December 1, 1961 and 2 males, a female and 3 immature birds at one time on January 10 at an Albemarle, N. C., feeder, Mrs. John Whitlock. • **Brewer's Blackbird,** 6 in a flock of Brown-headed Cowbirds, and grackles in a city yard, January 12 when temperatures were in the low twenties at Wilmington, N. C., Mrs. Polly Mebane and Greg Massey. • **Pine Siskin,** 8 on January 9, and 17 on January 24 and some at intervals until March 22, at North Wilkesboro, N. C., Wendell P. Smith. • **Brown-headed Cowbird,** migration reached peak, February 28, when 300 were seen at North Wilkesboro, N. C., Wendell P. Smith. • **Bachman's Sparrow,** 1 watched in Charleston County, S. C., March 18, B. R. Chamberlain *et al.* • **Chipping Sparrow,** 3 at yard feeder in Charlotte, N. C., March 3, after being absent since November 19, 1961, excepting 1 on December 9, 1961, the J. R. Norwoods; 2 at North Wilkesboro, N. C., March 29, Wendell P. Smith.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1962 unless otherwise shown.*

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization with no paid personnel. Dues, contributions, and bequests to the Club are deductible from State and Federal income and estate taxes.

MEMBERSHIP

Membership is open to anyone interested in birds, wildlife, and out-of-doors. The annual dues for the classes of membership are:

Regular	$1.00	Contributing	$25.00
Supporting	$5.00	Affiliated Club	$2.00

Life—$100.00 (payable in four consecutive annual installments)

All members not in arrears for dues receive *The Chat*. Seventy-five cents of each annual membership fee is applied as the annual subscription to *The Chat*. Checks should be made payable to the Carolina Bird Club, Inc. Application blanks may be obtained from the Treasurer, to whom all correspondence regarding membership should be addressed.

The activities of the Club and the coverage of *The Chat* will grow in amount and quality as increased funds become available. Prompt payment of dues and the securing of new members are vital contributions open to everyone.

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Division of Birds

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Editor: David W. Johnston, Department of Biology, Wake Forest College Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Louisiana Herons on Battery Island near Southport, North Carolina. Photographed by Jack Dermid.

THE 1961-1962 FLIGHT OF EVENING GROSBEAKS

By B. R. Chamberlain

For the Carolinas the AOU Check-list (1957) spells out Chapel Hill, North Carolina and Greenville, South Carolina as southernmost points in the sporadic winter range of the Evening Grosbeak (*Hesperiphona vespertina*). These locality records were established in the 1951-1952 flight (*Chat* **16**:30, 1952), but they have been overreached progressively in each of the five major flights reaching us since 1952. The 1961-1962 flight, examined here, was continent-wide with grosbeaks being found within 100 miles of the Gulf in Alabama, Mississippi, and Louisiana (James, *Audubon Field Notes*, **16**:337, 1962). Also, since 1951 the frequency of the incursions into the Carolinas has increased from sporadic to biennial—or better—for we have already witnessed major flights in two successive years (1954-1955 and 1955-1956), with occasional strays between flight years (1960-1961).

Gradually, evidence is being accumulated pointing toward the factors controlling these flights. Weather, as a direct factor, apparently is being ruled out, whereas food supply and population increase are gaining support. However, solutions to those problems must be sought in broader studies than ours.

Naturally, the bulk of the reports sent to us were confined to basic distribution data—number, date, location, observer—and some of these were incomplete. A very good number included sex data and fewer added food or behavior. Apparently no one was able to shed light upon roost locations although some effort was made toward doing so. Many of the reports stressed the early morning feeding hours. It appears that the usual arrival time was about 45 minutes after sunrise. In several reports maximum numbers were counted around arrival time and almost invariably the birds absented themselves an hour or so after noon—except at the end of their stay—and were nowhere to be found in the evenings, belying their name. *Vespertina*, according to Elliott Coues, was given to them in the mistaken belief that they sang only in the evenings.

Arrival dates. In addition to the biennial pattern that was becoming fixed, an unusually successful breeding season in 1961 prompted predictions of a "Grosbeak winter" in the South. Fulfillment was indicated as early as October 29 when Charlotte Dawley and party found about one dozen of the birds in the Dan River bottom, Rockingham County, in upper central North Carolina. During November, one or two grosbeaks were reported at Acme, Elkin, and Lenoir, all in North Carolina, and in December, numbers up to twenty were reported at Henderson, Hickory, Rocky Mount, Southern Pines, Tryon, and Washington, N. C. Simultaneously they were found on the coast at Wilmington and Charleston on January 11. They reached Atlanta, Georgia by the end of December.

Numbers. High and low attendance numbers fluctuated to such an extent that they seem meaningless, other than to suggest inter- and intra- community wandering. This may have been brought on by irregular sunflower seed supply or the whim of the vagabonds. A distinct peak period that was commented upon by several observers occurred during the two or three weeks prior to departure in the spring, a feature to be discussed later in this paper.

Average attendance at the small feeders over the Carolinas was probably about five birds but much larger groups were commonplace. Apparently, from mid-February until the end of April any ardent caterer with an established station and sufficient capital to provide one hundred or more pounds of sunflower seed per month, had little trouble attracting 25 to 75 or more grosbeaks regularly. At Lancaster, S. C., a baited flock checked daily from March 19 through April 1, and increased from 56 on the first day to a peak of 215 on March 23. By April 1 only 14 were present.

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Sex. As in numbers, there was considerable variation in reported sex ratios. Small groups, and some larger ones, were predominantly males—except at the end of the season. The last few birds recorded were females. At Chapel Hill, N. C., Beers judged the sex ratio at his feeders to be about 1:1 until most of the birds had left. His interesting report shows 5 males and 3 females arriving on January 29, increasing by February 3 to 30 to 50 daily until April 23. There was a sudden pick up on April 24 to 95 birds and a drop to 20 by May 2. At Washington, N. C., a flock of around 100, present daily from March 8 through April 1, contained approximately 50 males (Cox). At Seven Springs, N. C., a flock of 75 that began decreasing in mid-April, was estimated to be 60 per cent males (Siler), and at Dillon, S. C., a flock of 49 in mid-February was 69 per cent males (McCallum).

From Southern Pines, in the sandhills of North Carolina, Miss Mary Keller Wintyen contributed her daily log of the Evening Grosbeaks she personally saw and of those reported to her from points within a few miles of her home. She noted daily weather and temperature, sexes, food, and comments from the arrival on December 11, 1961 until the departure on May 10, 1962. Upon adding the daily figures in this voluminous study, we get the impressive grand total of 12,715 grosbeaks observed. Of this number, sexes were counted or estimated for all but 536. The following table, in which this latter figure and a few scattered birds prior to January 22 and after April 30 are excluded, shows an interesting shift in sex ratios at Southern Pines.

Period	*Observer*	*Total, both sexes*	*Males*	*% Males*
Jan. 22	HKW	310	175	56.6
to Jan. 30	Others	848	392	46.2
February	HKW	1175	411	35.0
	Others	3172	1471	46.4
March	HKW	1367	444	32.5
	Others	3505	1171	33.5
April	HKW	631	232	36.8
	Others	1164	354	30.4

Further analysis of the Southern Pines figures shows that the average daily attendance during March was 157. During February—a short month—the figure was only slightly lower. It is also apparent that the decrease in the per cent of males as the season progressed was not due to males leaving the area but to a disproportionately large number of females coming in.

Food, Behavior. Sunflower seed was eaten almost exclusively. On two occasions the grosbeaks were seen to leave the sunflower seed temporarily while they worked over lawns freshly planted in rye grass. One worked briefly on an ear of green corn. "Yard" berries mentioned were dogwood, nandina, and pyracantha. Away from feeders, the grosbeaks were seen to take ironwood and box elder fruits and the young buds of several species of trees. Typical feeding station behavior is given in the following note by McCallum: ". . . they arrive in the day's maximum concentration around 7:15 AM. First they occupy a pecan tree that is 15 feet from the window, with limbs reaching to within 8 feet. Then they fall to the ground or to the feeder. The first eating period lasts 20 to 30 minutes if they are not disturbed. After this they retire to the tree to preen. Ensuing periods are gradually shorter and finally many of them drift away until by noon there are hardly more than half a dozen left. Occasionally a flock will return late in the morning and a few have stayed until 2 o'clock.—Often two birds fight over a single sunflower seed, fluttering to the ground but never giving in to the other. When the food becomes scanty a single male occupies the feeder and defends it against the others."

Departure. Excluding a sick bird, the last male Evening Grosbeak in the 1961-1962 flight was reported on May 11 and the last female, on May 14—both at Washington, N. C., near the coast. At Tryon, N. C., a group of 4 males and 5 females remained until May 9. A solitary female left Hartsville, S. C., on May 5. Unquestionably, the bulk of the birds moved north during the first day or two after Apr. 30, when warm or hot winds came up from the south. Whether the wind triggered the flight we cannot say. Certainly the birds had been preparing for the flight for a couple of weeks. During the last half of April "they ate and drank all day," and many remained until dusk. It was during this period that the numbers swelled at many of the stations as birds from more southern points moved up.

Observations at Chapel Hill, N. C., during the departure period seem representative for our region and we can do no better than quote that part of Dr. Beers' report:

> April 24. Sudden increase in numbers, as if gathering prior to migration; 95 birds present (about 50, April 23).
> April 25-29. 65 to 90 daily.
> April 30. Sudden decrease; only 50 present.
> May 1. Further decrease; only 30 counted.
> May 2. Only 20; 7 males, 13 females.
> May 3. 7 males and 14 females.
> May 4. 4 males and 8 females.
> May 5. 2 males and 11 females.
> May 6. 14 females.
> May 7. 2 females.
> May 8 and 9. None seen or heard.
> May 10. A lone female, the last one of the season, feeding and calling at 4:00 P.M.
> I cite the following examples of late afternoon feeding—presumably storing fat in preparation for their migratory flight:
> May 1. A male and 2 females at 4:00 P.M.
> May 2. 3 females at 4:40; a male at 6:00 P.M.
> May 3. 2 males and 3 females at 4:30 P.M.
> May 4. A male and 2 females at 5:00 P.M.
> May 5, 6. 4 to 6 females at 5:00 P.M.
> May 7. 2 females feeding and calling intermittently from early morning to 5:30 P.M.

As in our earlier studies, the localities reported upon are but a fraction of the places where Evening Grosbeaks could have been found in the Carolinas this past winter. However, the forty-eight localities represented here are well spread over our territory. By listing the contributors at each community we strengthen our summary and express our thanks for their very fine cooperation.

North Carolina
Acme, Mrs. B. E. DeLamater, Jr.
Asheville, Dr. N. L. Anderson.
Atkinson, Mary Helen Huntington
Bath, see Washington, N. C.
Bay View, Geraldine Cox.
Blowing Rock, Gaston Gage.
Canton, Ann Kinken.
Cashiers, Mrs. R. D. Barton.
Chapel Hill, C. D. Beers and Gerald R. MacCarthy.
Charlotte, Dr. and Mrs. W. G. Cobey and the J. R. Norwoods.
Crumpler, Mrs. A. B. Hurt.
Durham, Sally Huges-Schrader.
Elkin, Linville Hendren.
Ellerbe, Mrs. Frances McD. Rankin.
Fayetteville, Doris C. Hauser.
Fremont, Mrs. Ernest Jeffreys.
Greensboro, Charlotte Dawley.
Greenville, Travis L. Herring.
Hickory, J. Weston Clinard and Garvin Hughes.
Henderson, Mrs. A. W. Bachman, Mrs. S. R. Harris and Miss Carrie Morrison.
Hillsboro, C. H. Blake.
Lenoir, Margaret Harper and Mrs. Fred May.
Linville Falls, Mrs. H. F. Greer.
Marion, Mrs. C. C. Wise.
Mt. Olive, Mrs. R. P. Holmes, II and Bob Thomas.
North Wilkesboro, Wendell P. Smith.
Raleigh, H. T. Davis and Carr Speight.
Rocky Mount, J. W. E. Joyner and John Thompson.
Seven Springs, R. H. Siler.
Southern Pines, Mary Keller Wintyen.
Tryon, C. T. Downer and Mrs. F. S. MacGregor.

North Carolina (cont.)
Wake Forest, Mr. and Mrs. Neville Isbell.
Washington, Ethel Barkley, Mrs. Helen Bobbitt, Geraldine Cox, Mrs. Sue Graves, Barbara Lisles, and Mrs. J. I. McLaurin.
Wilmington, Mrs. Dot Earle and Greg Massey.
Wilson-Rocky Mt., Hwy., Mr. & Mrs. R. J. Peoples, Jr., fide Maurice Broun.
Winston-Salem, D W. Johnston.

South Carolina
Charleston, T. A. Beckett, III and Betty Clark.
Chester, Mrs. William C. Miller and Mrs. W. C. Stone.
Columbia, Gilbert Bristow, Ruth Elliott, Mrs. B. W. Kendall, Mrs. Clyde Sisson and Mrs. E. D. Smith.
Dillon, Arch McCallum
Florence, Linda Summer.
Hartsville, Mrs. Pinckney A. King.
Lancaster, W. T. Myers, Sr.
McClellanville, R. D. Edwards.
Newberry, Mrs. B. W. Kendall.
Springfield, Elizabeth C. Gleaton.
Winnsboro, Mrs. Edwin McMasters.

Wadmalaw Island, South Carolina, July 19, 1962.

W. L. POTEAT—EARLY N. C. NATURALIST *

By Martha Whicker

Dr. William Louis Poteat was born near Yanceyville, North Carolina on October 20, 1856. His early life was spent on his father's plantation where he developed a keen interest in Nature. This curiosity and interest led Dr. Poteat to eminence in the field of biology.

At the age of sixteen he entered Wake Forest College in Wake Forest, North Carolina. He excelled in all fields and was especially interested in religion and biology. After leaving college for one year to obtain the money needed to finish his schooling, he graduated from Wake Forest in 1877 and returned home to work and study law. After one year of studying he was asked to return to Wake Forest in the role of assistant professor of Biology. He became a Professor of Biology in 1883.

Dr. Poteat met and married Miss Emma James Purefay in 1881. They had two daughters and one son. In 1888 he went to study at the University of Berlin. After his return to Wake Forest he continued his work in biology and in 1893 he went to Woods Hole Biological Laboratory in Buzzard's Bay, Mass. to study embryology.

During his life Dr. Poteat kept sporadic notebooks and journals that record his observations, feelings, and ideas. It is from the fifty notebooks and journals in the Wake Forest Library that the majority of this paper is taken.

Dr. Poteat had a great interest in natural history. He kept records on the interesting specimens he collected and saw. This interest was with him from childhood until the time of death, but it was concentrated mainly from the 1870's through the early 1900's. In a notebook by Dr. Poteat about his memories as a child he tells of the enjoyment and pleasure he and his Negro friend, Nat, had fishing and walking in the fields trying to identify birds. He relates that this was a game to see who could identify the most birds or find the most animals during the day. At night they would sit together and talk over what they had seen during the day. This interest in vertebrates and their environment followed him through the rest of his life.

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* Condensed from a lengthy term paper prepared for a course in Vertebrate Natural History at Wake Forest College, January, 1962.

From a journal entitled *Gleanings* (Vol. II, 1881) written by Dr. Poteat can be found this passage about the migration of birds:

> "Here it is October, 1881 and I have been watching the birds migrate. I have been reading about migration and studying the birds that have gone by. I have settled on seven possible ideas to their migration.
>
> (1) The habit of migration resulted from changes of climate occurring at a not very remote geological period.
>
> (2) Every gradation exists between species the most widely roving and those which are strictly sedentary; even representatives of the same species may be either migratory or sedentary according to whether they occupy as breeding stations, the northern or the southern portion of the common habitat.
>
> (3) Failure of food induces a movement toward warmer regions.
>
> (4) The return of birds to their breeding places which are their only true homes is prompted by the recurrence of the season of procreation and strong home affection.
>
> (5) They usually pursue different routes, and are guided in part by memory, prominent landmarks, and in part by "instinct" or inherited experience.
>
> (6) Erratic movements are the results of transportation by storms.
>
> (7) Birds discern approaching weather changes."

Taken also from this journal *Gleanings,* 1881, is an account about a Yellow Chat:

> *July 16, 1882* "Yellow Chat does not greet me from afar this morning. It is only after I have entered his domain, penetrated the heart of it and settled myself in its deep shadows that I hear his cluck, cluck, and just catch a glimpse of him through the thicket twenty yards away. A little warbler (brown and alive above and yellow below with dark lines at sides) comes near and finding a long caterpillar beats out its intestine on a fine limb, retreating backward up the limb as the process advances, and then with beak sloping up and a momentary bulging of the little yellow throat the prepared morsal is gone."

Dr. Charles Allen, Professor of Biology at Wake Forest College was given a journal written by Dr. Poteat at the time of his death. It is from this journal that much of the following material will be taken, dated from 1888 to 1900.

On February 25, 1888 Dr. Poteat reported: "First flock of Robins seen yesterday. A solitary herald was seen February 1, 1888." On February 28, 1888 Dr. Poteat reported that he killed a Shrike. According to his notes this was the third specimen ever seen by him in this particular area. There is an interesting account of a Red Phalarope in this journal. This Phalarope was kept for five days by Dr. Poteat.

March 21, 1888: "Red Phalarope, *Crymophilus fulicarius* picked up at Mr. Gill's house this morning, probably born thither by the storm of the previous night. Given the freedom of the room, the bird seemed quite at home and soon dropped down on its white breast duck-fashion to rest. He would start up and shake his tail if too suddenly approached. He was put into a pan of water and offered among other things an earthworm, which he scarcely noticed. Whether sitting on the carpet or floating on the water he would depress his head and seem to diminish the size of his body when approached from the other side of the room, and as one passes by him he would tilt over toward one as if to put his inconspicuous wing and back between his conspicuous white breast and side and the possibly hostile observer. This was observed a number of times in a number of different situations. He rose and flew toward the lighted lamp from the darker side of the room several times. Once he alighted on the marble table and assumed his nesting posture on a crocheted mat beside a Bible, Ruskins Praeterita, and Flints Anti Rhustic Theories, and the scene proved not a little suggestive. This little wanderer from the polar seas thus composed and unabashed amid the symbols of mans highest achievements."

March 22, 1888: "My little ocean waif was found this morning resting on the carpet. He seemed to have spent a good night for he was more active than on yesterday and a little more wary. He again declined offers of food. He was brought to the Biology lab and put into a ten inch aquarium with some large and small tadpoles. He began to peck at them almost immediately. He seemed delighted with his new environment stretching his shoulders and flapping his wings in the water and dressing his feathers, now and then, however, swimming violently against the sides of the aquarium trying to get out. He keeps the sand and the mud stirred up. A sprig of *Ludwigia palustris* with many young water snails on it was put into the aquarium."

March 23, 1888: "Red Phalarope left free in the laboratory last night was found this morning at one of the windows trying to push out through the glass. He returned to the aquarium. After stirring up things in the aquarium he pecks vigorously at floating particles and at little snails clinging to the sides, now and then securing one of them."

March 24, 1888: "Red Phalarope found this morning on the water in a tall aquarium six inches in diameter. He spent the day in much the same way as described above. He was given seasons of rest from the water by allowing him liberty on the floor. Looks not quite so strong."

March 25, 1888: "Found the Red Phalarope dead on the water where he was left last night. No evidence of struggle or violence visible."

As he was walking one day he listed this account with two Snipes.

March 24, 1888: "Two Snipes rose from the same locality, one of them making two harsh notes, and they flew in high circles for a minute or two apparently to give me time to leave, and finally dropped suddenly down into the field lower down the branch."

The next vertebrate encountered from Dr. Poteat's journal is the "Horned Toad" caught in Texas and mailed to J. A. Rogers.

November 22, 1892: "A species of *Phrynosoma cornutum* ("Horned Toad") sent by mail from Texas and presented to the lab by J. A. Rogers, is put in a large glass dish with the bottom covered with sand. After being warmed in the sun (November 23, 1892) it makes vigorous efforts to escape, but later is found covered up and almost entirely concealed in the sand, extremely sluggish with scarcely perceptible respiration."

After the first few weeks the Horned Toad must have revived and escaped from his container. He evidently could not be found because the next entry concerning this Horned Toad was made on May 10 of that year. Dr. Poteat writes in his journal:

"The Horned Toad, which escaped from the jar some months ago and came out from his hiding place in the laboratory about two weeks ago, stubbornly refuses to eat. I have tried him with grasshoppers, beetles, flies, and earthworms. He has been given a bath of water occasionally but has not been seen to drink."

An amphibian, a salamander, is the next vertebrate to appear in Dr. Poteat's journal. He states:

January, 1893: "Received from Mr. Purefoy a large *salamander* which was taken from the bottom of his forty foot well when it was cleaned out."

Dr. Poteat tried to feed this salamander but with no success until May, 1893.

"Salamander of January last takes from forceps a live earthworm having a few minutes before eaten a piece of one dropped into his jar. This is the first food taken during his captivity."

June 8, 1893: "The salamander refused earthworm after May 9th."

In looking through the numerous lectures prepared and given by Dr. Poteat one finds reference and examples of the woodpeckers' freedom and his melodious drumming or pecking song. He makes reference to this steady pecking at wood as man pecking at life not aware of his surroundings. One reference in his notebook was found about the woodpecker.

March 14, 1893: Dr. Poteat writes:

"I observed three golden winged woodpeckers drumming on the roof of the laboratory, the slate shingles which yield notes of different pitch being used alternately."

This spring of 1893 the weather had been cool. Dr. Poteat writes of the snow birds (probably juncos) in his orchard. In the early part of April he says that he has heard the first Whippoorwill's song in the early evening.

Dr. Poteat returned from Buzzard's Bay, Mass. in September to Wake Forest to resume teaching. On November 26, 1893: "A flock of six 'South Carolina Buzzards' flew over Wake Forest east about five oclock. These were soon followed by Turkey Buzzards going in the same direction." This is the last entry in the journal until 1898 at which time Dr. Poteat writes about a white Dove and a Thistlefinch that interested him.

September 24, 1898: "A white Dove flew up near the road on the return trip from Moore's pond. An ordinary Dove was with the white one. They were in the field west of Smith's Creek. I got a second view of the Albino Dove as it sat on a pine limb. A Thistlefinch then flew over head. It attracted me by its note."

There can be found in the Bird Collection at Wake Forest College several birds collected and prepared by Dr. and Mrs. Poteat. In this group can be found a male and female Cardinal, Spotted Sandpiper, marsh blackbird and several other small birds. Some of these were prepared in 1885 and 1886. There is also present in the Wake Forest collection a group of eggs collected and prepared by Dr. Poteat. There are numerous eggs of the Sparrow, Sparrow Hawk, Flicker, Thrush, Gnatcatcher, "crane" and some very small ones of a Vireo.

From a notebook titled "Meadow, Grove, and Stream" in 1896 can be found several accounts by Dr. Poteat. The first concerns a Yellow Chat.

June 18, 1902: "I found the Yellow Chat's nest in the pasture, slightly supported by a twig of Alder and of Grape. It has two eggs in it and was about seven feet from the ground. I waited three quarters of an hour, but no chat came to it or showed uneasiness about it."

June 19, 1902: "The Mother Chat was first seen this morning. She soon discovered me and abandoned the eggs. I waited again, but she did not return."

Dr. Poteat died in March, 1938, but throughout his life he retained his interest in vertebrates and their natural history. Much of the material he left behind has been misplaced or given to friends, but the remaining material was presented here to show that his interest in Biology and especially vertebrates was used by him in many of his lectures. letters, and books.

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Box 258, Walkertown, North Carolina.

THE 1962 SPRING COUNT

By David W. Johnston

A few summary statements seem desirable for the 1962 Spring Counts. Only fifteen counts were received, a decrease of two over 1961. These counts were taken between April 25 and May 12, with most of them occurring on May 5 or 6. In general, weather conditions were nearly ideal for observing birds, for most localities reported clear or only partly cloudy skies and temperatures ranging between the high 50's and mid-80's. Six localities reported an increase in number of species and seven noted an increase in total individuals, as compared with the 1961 counts.

Although comparisons from year to year are hazardous due to changes in observers, weather, and the like, it is possible to recognize some likely trends by comparing data for several years. The following table compares certain data for the spring counts of 1960, 1961, and 1962. Of particular interest is the apparent decrease in number of Bluebirds in 1962 and a subsequent increase in Starlings. I have long contended that much of the Bluebird loss in recent years should be attributed to its competition with the aggressive Starling for hole nesting sites.

	1960	1961	1962
Number of counts	12	17	15
Number of observers	130	191	157
Number of party-hours*	338	489	551
Number of Bluebirds	122	282	150
Number of Starlings	1736	2338	3743
Number of Evening Grosbeaks	75	0	132
Number of Cattle Egrets	6	57	62

*Based upon about 75 per cent of localities reporting.

Another feature of this table concerns the numbers of Evening Grosbeaks and Cattle Egrets. The Evening Grosbeak data are adequately discussed by Mr. Chamberlain elsewhere in this issue. As for the Cattle Egrets, we can say that they continue to increase and expand their range. In 1962, for example, these birds have appeared farther inland than previously—Durham, North Carolina (a "sizable flock" on April 29), Raleigh, North Carolina, Eastover, South Carolina, and Fayetteville, North Carolina. Although this species' spread has attracted much attention, we can only wonder when or if the dispersal might end, and hope that its presence will be innocuous. After all, both Starlings and House Sparrows were once considered to be harmless novelties in North America.

Aiken, S. C. (area within a 15-mile diameter circle centering approximately 7 miles east of the old town of Ellenton; upland pine timber stands and pine plantations 30%, bottomland hardwood forest 25%, Savannah River swamp 20%, lakes and bays 10%, scrub oak 5%, open fields 5%, and building areas 5%).—May 4; 7:00 AM to 5:00 PM. Partly cloudy; temp. 60° to 82°; wind W. Four observers. Total party-hours, 40; total party-miles, 76 (6 by foot, 70 by jeep). Pied-billed Grebe, 5 (plus 3 young); Great Blue Heron, 3; Green Heron, 1; Common Egret, 2; American Bittern, 1; Least Bittern, 2; Wood Duck, 2; Turkey Vulture, 12; Black Vulture, 8; Mississippi Kite, 3; Cooper's Hawk, 1; Red-tailed Hawk, 3; Red-shouldered Hawk, 4; Sparrow Hawk, 1; Bobwhite, 45; Purple Gallinule, 4; American Coot, 4; Killdeer, 1; Common Snipe, 1; Spotted Sandpiper, 4; Greater Yellowlegs, 9; Sanderling, 2; Mourning Dove, 20; Yellow-billed Cuckoo, 2; Barred Owl, 1; Chimney Swift, 12; Ruby-throated Hummingbird, 3; Belted Kingfisher, 1; Yellow-shafted Flicker, 1; Pileated Woodpecker, 4; Red-bellied Woodpecker, 4; Red-headed Woodpecker, 1; Hairy Woodpecker, 1;

Downy Woodpecker, 2; Eastern Kingbird, 16; Great Crested Flycatcher, 8; Acadian Flycatcher, 20; Wood Pewee, 4; Rough-winged Swallow, 1; Blue Jay, 20; Common Crow, 35; Fish Crow, 6; Carolina Chickadee, 12; Tufted Titmouse, 6; Brown-headed Nuthatch, 6; Carolina Wren, 20; Long-billed Marsh Wren, 1; Mockingbird, 36; Catbird, 7; Brown Thrasher, 11; Wood Thrush, 20; Hermit Thrush, 1; Swainson's Thrush, 6; Gray-cheeked Thrush, 1; Veery, 3; Eastern Bluebird, 16; Blue-gray Gnatcatcher, 30; Ruby-crowned Kinglet, 1; Cedar Waxwing, 7; Loggerhead Shrike, 4; Starling, 16; White-eyed Vireo, 40; Yellow-throated Vireo, 6; Red-eyed Vireo, 35; Black-and-white Warbler, 6; Prothonotary Warbler, 26; Worm-eating Warbler, 1; Blue-winged Warbler, 1; Parula Warbler, 25; Yellow Warbler, 3; Cape May Warbler, 1; Black-throated Blue Warbler, 6; Myrtle Warbler, 6; Yellow-throated Warbler, 12; Pine Warbler, 4; Prairie Warbler, 23; Ovenbird, 7; Louisiana Waterthrush, 9; Kentucky Warbler, 3; Yellowthroat, 32; Yellow-breasted Chat, 10; Hooded Warbler, 18; American Redstart, 1; House Sparrow, 20; Eastern Meadowlark, 56; Redwinged Blackbird, 32; Orchard Oriole, 10; Common Grackle, 16; Summer Tanager, 8; Cardinal, 27; Blue Grosbeak, 12; Indigo Bunting, 8; Painted Bunting, 3; American Goldfinch, 20; Rufous-sided Towhee, 13; Savannah Sparrow, 2; Bachman's Sparrow, 3; Field Sparrow, 2; White-throated Sparrow, 6; Swamp Sparrow, 1. Due to unusually high water levels, only a small number of shorebirds was recorded, and up until two days before the count there was almost a complete absence of egrets and herons. **Total** species, 100; total individuals, 1022.—John B. Hatcher (compiler), Newton H. Seebeck, Jr., William Post, Jr., and Jay Schnell.

Anderson, S. C. (same area as last year with center at Anderson Airport; open fields and pasture 20%, mixed woodland 15%, deciduous woodland 15%, pine woodland 20%, ponds and creeks 10%, town 5%, Hartwell area 15%).—April 28; 4:30 AM to 7:30 PM. Clear to partly cloudy, with showers in the late afternoon, temp. 60° to 84°, winds variable 0-10 mph. Ten observers, 8 in three parties, 2 at feeders. Total party-hours, 42½ (27½ on foot, 15 by car). Total party-miles, 310 (295 by car, 15 on foot). Common Egret, 21; Green Heron, 3; Black Duck, 1; Blue-winged Teal, 1; Wood Duck, 1; Turkey Vulture, 8; Black Vulture, 5; Sharp-shinned Hawk, 1; Cooper's Hawk, 3; Red-shouldered Hawk, 2; King Rail, 2; American Coot, 2; Killdeer, 1; Common Snipe, 2; Spotted Sandpiper, 6; Solitary Sandpiper, 6; Ring-billed Gull, 11; Mourning Dove, 24; Yellow-billed Cuckoo, 2; Barn Owl, 3; Screech Owl, 1; Great Horned Owl, 2; Barred Owl, 1; Chuck-will's-widow, 7; Chimney Swift, 59; Ruby-throated Hummingbird, 16; Belted Kingfisher, 5; Pileated Woodpecker, 2; Yellow-shafted Flicker, 13; Red-bellied Woodpecker, 4; Red-headed Woodpecker, 3; Hairy Woodpecker, 4; Downy Woodpecker, 6; Eastern Kingbird, 25; Great Crested Flycatcher, 4; Eastern Phoebe, 13; Acadian Flycatcher, 1; Eastern Wood Pewee, 3; Horned Lark, 2; Rough-winged Swallow, 18; Purple Martin, 3; Blue Jay, 106; Common Crow, 109; Carolina Chickadee, 27; Tufted Titmouse, 24; Brown-headed Nuthatch, 6; White-breasted Nuthatch, 1; Carolina Wren, 15; Mockingbird, 66; Catbird, 17; Brown Thrasher, 48; Robin, 181; Wood Thrush, 23; Swainson's Thrush, 2; Veery, 2; Eastern Bluebird, 7; Blue-gray Gnatcatcher, 24; Ruby-crowned Kingler, 2; Water Pipit, 1; Loggerhead Shrike, 12; Starling, 347; White-eyed Vireo, 41; Yellow-throated Vireo, 4; Solitary Vireo, 3; Red-eyed Vireo, 20; **Warbling Vireo,** 2; Black-and-white Warbler, 2; Parula Warbler, 3; Yellow Warbler, 15; Magnolia Warbler, 3; Cape May Warbler, 4; Black-throated Blue Warbler, 3; Myrtle Warbler, 151; Cerulean Warbler, 3; Blackburnian Warbler, 1; Blackpoll Warbler, 11; Pine Warbler, 3; Prairie Warbler, 55; Palm Warbler, 10; Ovenbird, 2; Yellowthroat, 35; Hooded Warbler, 16; Redstart, 5; House Sparrow, 113; Bobolink, 256; Red-winged Blackbird, 640, Eastern Meadowlark, 589; Orchard Oriole, 8; Baltimore Oriole, 6; Rusty Blackbird, 1; Common Grackle, 160; Brown-headed Cowbird, 39; Summer Tanager, 6; Scarlet Tanager, 5; Cardinal, 59; Rose-breasted Grosbeak, 4; Blue Grosbeak, 18; Indigo Bunting, 13; American Goldfinch, 162; Rufous-sided Towhee, 176; Savannah Sparrow, 7; Grasshopper Sparrow, 31; Chipping Sparrow, 72; Field Sparrow, 102; White-crowned Sparrow, 14; White-throated Sparrow, 147; Swamp Sparrow, 4. **Total** species, 108; total individuals, about 4,350. Seen during the count period, but not on count day: Horned Grebe, Pied-billed Grebe, Great Blue Heron, Black-crowned Night Heron, American Bittern, Virginia Rail, Greater Yellowlegs, Blue-winged Warbler, Prothonotary Warbler. The Horned Larks (RCT) were quite late for this area, as was the pipit (RHP). The number of White-crowned Sparrows was unusual; they were well distributed over the area and seen by all parties.—Mrs. Rufus Fant, R. H. Peake, Jr., Mrs. Ellison Smith, Mrs Joe P. Watson, Mrs. A. A. Hutchinson, Miss Bitsy Ramseur, Douglas Tedards, Bob Watson, Mr. and Mrs. R. C. Tedards (compiler).

Central Beaufort County, N. C. (all points within a 15-mile diameter circle centering where Upper Goose Creek enters Pamlico River, including both sides of the river from Bath to Washington; river and river shore 30%, fields 30%, mixed woods 25%, pine woods 5%, feeders 10%).—May 6; 5 AM to 7 PM. Fair; temp 60° to 90°; wind W, 0-17 mph. Five observers (one part-time) in 2 parties. Total party-hours, 28 (16 on foot, 12 by car); total party-miles, 146 (10 on foot, 136 by car). Double-crested Cormorant, 8; Great Blue Heron, 2; Cattle Egret, 6; Common Egret, 1; Canada Goose, 5; Mallard, 4; Turkey Vulture, 2; Black Vulture, 1; Red-shouldered Hawk, 1; Bobwhite, 60; Killdeer, 2; Spotted Sandpiper, 2; Herring Gull, 1; Ring-billed Gull, 43; Laughing Gull, 29; Bonaparte's Gull, 10; Mourning Dove, 32; Yellow-billed Cuckoo, 1; Chimney Swift, 53; Ruby-throated Hummingbird, 1; Belted Kingfisher, 1; Yellow-shafted Flicker, 6; Pileated Woodpecker, 1; Red-bellied Woodpecker, 8; Red-headed Woodpecker, 20; Hairy Woodpecker, 1; Downy Woodpecker, 2; Red-cockaded Woodpecker, 1; Eastern Kingbird, 29; Great Crested Flycatcher, 38; Eastern Phoebe, 1; Eastern Wood Pewee, 15; Tree Swallow, 4; Rough-winged Swallow, 4; Barn Swallow, 13; Purple Martin, 73; Blue Jay, 37; Common Crow, 18; Fish Crow, 9; Carolina Chickadee, 15; Tufted Titmouse, 7; White-breasted Nuthatch, 2; Brown-headed Nuthatch, 7; Carolina Wren, 16; Mockingbird, 39; Catbird, 3; Brown Thrasher, 23; Robin, 12; Wood Thrush, 6; Eastern Bluebird, 5; Loggerhead Shrike, 6; Starling, 74; White-eyed Vireo, 15; Yellow-throated Vireo, 2; Red-eyed Vireo, 8; Prothonotary Warbler, 9; Parula Warbler, 8; Myrtle Warbler, 1; Yellow-throated Warbler, 1; Pine Warbler, 2; Prairie Warbler, 23; Ovenbird, 2; Yellowthroat, 5; Hooded Warbler, 3; House Sparrow, 250; Eastern Meadowlark, 7; Red-winged Blackbird, 32; Orchard Oriole, 13; Common Grackle, 200; Brown-headed Cowbird, 3; Scarlet Tanager, 1; Summer Tanager, 7; Cardinal, 63; Blue Grosbeak, 1; Indigo Bunting, 3; **Evening Grosbeak**, 6; Rufous-sided Towhee, 11; Chipping Sparrow, 12; White-throated Sparrow, 1; Fox Sparrow, 8. **Total** species, 80; total individuals, about 1,457. In the area, April 29-May 5 but not on count day: Whistling Swan, 1; Black Duck, 2; Greater Yellowlegs, 1; Chuck-will's-widow, 2; Common Nighthawk, 6; Blue-gray Gnatcatcher, 2; Yellow Warbler, 1.—Ethel Barkley, Ruth Brown, Geraldine Cox (compiler), Mabel Godley, Mary McLaurin.

Chapel Hill, N. C. (all points within a 15-mile diameter circle, center at intersection of Columbia and Franklin streets, including town of Chapel Hill and University Campus, Carrboro, Airport, Lake Forest and University Lakes, Finley Golf Course and Mason Farm; mixed deciduous woodlands 25%, open fields and farmlands 30%, pond, lake shores and creek banks 25%, pine woods 5%, wooded residential 15%).—May 6; 5:30 AM to 6 PM. Clear; temp 54° to 87°; wind variable, 1-6 mph. Twenty-four observers in 12 parties. Total party-hours, 52½ (41 on foot, 11½ by car); total party-miles, 126½ (31½ on foot, 95 by car). Great Blue Heron, 2;

Green Heron, 2; Turkey Vulture, 32; Black Vulture, 8; Sharp-shinned Hawk, 1; Cooper's Hawk, 1; Red-tailed Hawk, 2; Red-shouldered Hawk, 1; Broad-winged Hawk, 1; Sparrow Hawk, 1; Bobwhite, 98; Turkey, 1; Killdeer, 4; Spotted Sandpiper, 2; Solitary Sandpiper, 1; Mourning Dove, 107; Yellow-billed Cuckoo, 5; Black-billed Cuckoo, 1; Barred Owl, 4; Whip-poor-will, 7; Chimney Swift, 100; Ruby-throated Hummingbird, 15; Belted Kingfisher, 2; Yellow-shafted Flicker, 29; Pileated Woodpecker, 1; Red-bellied Woodpecker, 47; Red-headed Woodpecker, 12; Hairy Woodpecker, 5; Downy Woodpecker, 27; Eastern Kingbird, 46; Great Crested Flycatcher, 18; Eastern Phoebe, 27; Acadian Flycatcher, 21; Wood Pewee, 49; Tree Swallow, 1; Rough-winged Swallow, 9; Barn Swallow, 51; Purple Martin, 26; Blue Jay, 142; Common Crow, 73; Carolina Chickadee, 52; Tufted Titmouse, 37; White-breasted Nuthatch, 18; Brown-headed Nuthatch, 4; Brown Creeper, 1; House Wren, 2; Carolina Wren, 50; Mockingbird, 119; Catbird, 48; Brown Thrasher, 52; Robin, 78; Wood Thrush, 115; Swainson's Thrush, 1; Eastern Bluebird, 33; Blue-gray Gnatcatcher, 24; Ruby-crowned Kinglet, 2; Water Pipit, 1; Cedar Waxwing, 15; Loggerhead Shrike, 18; Starling, 89; White-eyed Vireo, 19; Yellow-throated Vireo, 7; Solitary Vireo, 3; Red-eyed Vireo, 92; Black-and-white Warbler, 5; Prothonotary Warbler, 6; Orange-crowned Warbler, 1; Parula Warbler, 16; Magnolia Warbler, 1; Cape May Warbler, 1; Black-throated Blue Warbler, 11; Myrtle Warbler, 23; Yellow-throated Warbler, 27; Chestnut-sided Warbler, 2; Blackpoll Warbler, 2; Pine Warbler, 10; Prairie Warbler, 45; Ovenbird, 31; Northern Waterthrush, 1; Louisiana Waterthrush, 10; Kentucky Warbler, 13; Yellowthroat, 28; Yellow-breasted Chat, 38; Hooded Warbler, 20; American Redstart, 54; House Sparrow, 79; Bobolink, 400; Eastern Meadowlark, 132; Redwinged Blackbird, 94; Orchard Oriole, 9; Baltimore Oriole, 1; Rusty Blackbird, 2; Common Grackle, 32; Brown-headed Cowbird, 23; Scarlet Tanager, 27; Summer Tanager, 36; Cardinal, 217, Rose-breasted Grosbeak, 4; Blue Grosbeak, 20; Indigo Bunting, 48; **Evening Grosbeak**, 2; American Goldfinch, 131; Rufous-sided Towhee, 39; Savannah Sparrow, 2; Grasshopper Sparrow, 3; **Henslow's Sparrow**, 1; Vesper Sparrow, 2; Chipping Sparrow, 88; Field Sparrow, 19; White-throated Sparrow, 45; Song Sparrow, 2. Total species, 111; total individuals, 3,665.—Dr. and Mrs. Charles H. Blake, Mrs. R. P. Calhoon, Louise Crumpacker, Dr. Robert P. Holmes, Dr. and Mrs. J. Logan Irvin, Joseph P. Jones, Mr. and Mrs. Gerald R. McCarthy, Mrs. Richard McKenna, Mrs. W. D. Patterson, Wallace Patterson, Jr., Wiley B. Sanders, Mr. and Mrs. Robert B. Sharpe, John K. Terres, Elizabeth P. Teulings, Robert P. Teulings (compiler), Mr. and Mrs. Matt L. Thompson, Mrs. Adelaide Walters, Mrs. Fred P. Weedon, Frances L. Yocom.

Charleston, S. C. (all points within a 15-mile diameter circle, center 15 miles north of Mt. Pleasant, just east of U. S. Highway 17, to include Bull's Island and area west across the mainland to points just beyond the Wando River; farmlands 20%, fresh-water ponds and wooded swamps 25%, mixed and pine woods 25%, salt-water creeks, marshes and flats 25%, dunes and ocean front 5%).—May 5; 6:30 AM to 5:30 PM. Clear, AM, occasional showers and thunder in PM; temp. 62° to 82°; wind NW, 5-9 mph. Nineteen observers in five parties. Total party-hours, 45 (32½ on foot, 11½ by car, 1 by boat); total party-miles, 192 (43 on foot, 145 by car, 4 by boat). Pied-billed Grebe, 5; Brown Pelican, 33; Double-crested Cormorant, 4; Anhinga, 7; Great Blue Heron, 22; Green Heron, 10; Little Blue Heron, 27; Cattle Egret, 36; Common Egret, 35; Snowy Egret, 22; Louisiana Heron, 37; Black-crowned Night Heron, 4; Yellow-crowned Night Heron, 4; American Bittern, 1; Wood Ibis, 15; Glossy Ibis, 3; White Ibis, 53; Blue-winged Teal, 12; American Widgeon, 1; Wood Duck, 17; Ring-necked Duck, 2; Scaup (sp.), 21; Turkey Vulture, 28; Black Vulture, 25; Mississippi Kite, 1; Cooper's Hawk, 1; Red-shouldered Hawk, 17; Bald Eagle, 3; Osprey, 7; Bobwhite, 34; Turkey, 4; Clapper Rail, 24; Virginia Rail, 1; Purple Gallinule, 4; Common Gallinule, 38; American Coot, 58; American Oystercatcher, 14; Semipalmated Plover, 84; Black-bellied Plover, 9; Ruddy Turnstone, 1; Common Snipe, 3; Whimbrel, 37; Spotted Sandpiper, 2; Willet, 24; Greater Yellowlegs, 6; Lesser Yellowlegs, 4; Dunlin, 36; Short-billed Dowitcher, 5; Semipalmated Sandpiper, 5; Marbled Godwit, 4; Sanderling, 6; Black-necked Stilt, 5; Herring Gull, 14; Ring-billed Gull, 24; Laughing Gull, 58; Gull-billed Tern, 12; Forster's Tern, 1; Least Tern, 8; Royal Tern, 11; Black Tern, 1; Black Skimmer, 67; Mourning Dove, 16; Ground Dove, 1; Yellow-billed Cuckoo, 60; Black-billed Cuckoo, 2; Barred Owl, 1; Chuck-will's-widow, 1; Common Nighthawk, 5; Chimney Swift, 81; Ruby-throated Hummingbird, 29; Yellow-shafted Flicker, 9; Pileated Woodpecker, 37; Red-bellied Woodpecker, 46; Red-headed Woodpecker, 4; Hairy Woodpecker, 2; Downy Woodpecker, 12; Red-cockaded Woodpecker, 4; Eastern Kingbird, 46; Great Crested Flycatcher, 175; Acadian Flycatcher, 64; Eastern Wood Pewee, 47; Tree Swallow, 157; Barn Swallow, 30; Purple Martin, 79; Blue Jay, 50; Common Crow, 63; Fish Crow, 14; Carolina Chickadee, 23; Tufted Titmouse, 53; Brown-headed Nuthatch, 23; Carolina Wren, 121; **Short-billed Marsh Wren** (Baker & Blitch), 2; Mockingbird, 32; Catbird, 6; Brown Thrasher, 20; Wood Thrush, 21; Hermit Thrush, 1; **Veery** (Clyde), 1; Eastern Bluebird, 4; Blue-gray Gnatcatcher, 38; Ruby-crowned Kinglet, 2; Cedar Waxwing, 3; Loggerhead Shrike, 11; Starling, 17; White-eyed Vireo, 113; Yellow-throated Vireo, 41; Red-eyed Vireo, 117; Prothonotary Warbler, 36; **Bachman's Warbler** (Beckett), 1; Parula Warbler, 22; Myrtle Warbler, 3; Black-throated Green Warbler, 11; Yellow-throated Warbler, 92; Pine Warbler, 53; Prairie Warbler, 28; Kentucky Warbler, 7; Yellowthroat, 24; Yellow-breasted Chat, 54; Hooded Warbler, 80; House Sparrow, 18; Meadowlark, 32; Redwinged Blackbird, 123; Orchard Oriole, 59; Rusty Blackbird, 15; Boat-tailed Grackle, 61; Common Grackle, 39; Scarlet Tanager, 1; Summer Tanager, 57; Cardinal, 116; Blue Grosbeak, 13; Indigo Bunting, 18; Painted Bunting, 87; American Goldfinch, 1; Rufous-sided Towhee, 69; Savannah Sparrow, 8; Vesper Sparrow, 6; Bachman's Sparrow, 3; Chipping Sparrow, 11; Field Sparrow, 1; White-throated Sparrow, 28; Swamp Sparrow, 2; Song Sparrow, 2. **Total**, 142 species; about 3800 individuals. (Seen in area during count period but not on count day: Least Bittern, Red-breasted Merganser, King Rail, Bobolink).—Roy Baker, T. A. Beckett, III, Mr. and Mrs. Edwin Blitch, B. R. Chamberlain, E. B. Chamberlain (compiler), N. A. Chamberlian, E. C. Clyde, Jr., Mr. and Mrs. R. H. Coleman, E. S. Dingle, R. W. Edwards, J L. Edwards, Mrs. John G. Leland, I. S. H. Metcalf, Mr. and Mrs. B. F. McGuckin, Mrs. M. D. Richardson, Miss Elizabeth D. Simons.

Charlotte, N. C. (7½ mile radius centering at 7th Street and Briar Creek; open field and farmland 50%, deciduous-pine woods and edge 35%, city lawns 10%, lakes and ponds 5%.) May 5; 5:30 AM to 9:30 PM. Fair to partly cloudy; temp. 54° to 85°; wind NNE, 0-13 mph. Nine observers in 5 parties. Total party hours, 42½ (32 on foot. 10½ by car); total party miles, 227 (20 on foot, 207 by car.) Green Heron, 1; Yellow-crowned Night Heron, 3; Turkey Vulture, 14; Sharp-shinned Hawk, 1; Red-tailed Hawk, 1; Red-shouldered Hawk, 1; Broad-winged Hawk, 1; **Marsh Hawk,** 1; Osprey, 1; Bobwhite, 82; Killdeer, 3; Solitary Sandpiper, 6; Mourning Dove, 237; Yellow-billed Cuckoo, 8; Black-billed Cuckoo, 1; Barn Owl, 1; Screech Owl, 2; Barred Owl, 2; Chuck-will's-widow, 1; Whip-poor-will, 5; Common Nighthawk, 3; Chimney Swift, 54; Ruby-throated Hummingbird, 8; Belted Kingfisher, 3; Yellow-shafted Flicker, 23; Red-bellied Woodpecker, 17; Red-headed Woodpecker, 4; Hairy Woodpecker, 2; Downy Woodpecker, 16; Eastern Kingbird, 28; Great Crested Flycatcher, 24; Eastern Phoebe, 18; Acadian Flycatcher, 6; Eastern Wood Pewee, 26; Rough-winged Swallow, 4; Barn Swallow, 17; Purple Martin, 20; Blue Jay, 128; Common Crow, 32; Carolina Chickadee, 36; Tufted Titmouse, 33; White-breasted Nuthatch, 4; Brown-headed Nuthatch, 11; House Wren, 9; Carolina Wren, 22; Mockingbird, 106; Catbird, 42; Brown Thrasher, 44; Robin, 218; Wood Thrush, 100; Swainson's Thrush, 14; Veery, 8; Eastern Bluebird, 18; Blue-gray Gnatcatcher, 5; Cedar Waxwing, 48; Loggerhead Shrike, 14; Starling, 405; White-eyed Vireo, 8; Yellow-throated Vireo, 10; Red-eyed Vireo, 39; Black-and-white Warbler, 5; Parula Warbler, 16; Yellow Warbler, 3; Magnolia Warbler, 1; Cape May Warbler, 10; Black-throated Blue Warbler, 3; Myrtle Warbler, 23; Black-throated Green Warbler, 1; Cerulean Warbler, 1; Blackburnian Warbler, 7; Bay-breasted Warbler, 1; Blackpoll Warbler, 5; Pine Warbler, 5; Prairie Warbler, 21; Ovenbird, 12; Louisiana Waterthrush, 2; Kentucky Warbler, 3; Yellowthroat, 26; Yellow-breasted Chat, 27; Hooded Warbler, 4; American Redstart, 6; House Sparrow, 143; Bobolink, 49; Eastern Meadowlark, 131; Redwinged Blackbird, 101; Orchard Oriole, 17; Baltimore Oriole, 1; Rusty Blackbird, 1; Common Grackle, 211; Brown-headed Cowbird, 7; Scarlet Tanager, 3; Summer Tanager, 13; Cardinal, 166; Rose-breasted Grosbeak, 1; Blue Grosbeak, 30; Indigo Bunting, 62; **Pine Siskin**, 3; American Goldfinch, 25; Rufous-sided Towhee, 81; Savannah Sparrow, 2; Grasshopper Sparrow, 19; Slate-colored Junco, 1; Chipping Sparrow, 54; Field Sparrow, 29; White-throated Sparrow, 41; Swamp Sparrow, 3; Song Sparrow, 13. **Total**, 107 species, about 3382 individuals. Mrs. W. G. Cobey, Mrs. Edwin O. Clarkson, J. P. Hamilton, Lee Jones, Mrs. A. A. Kittinger, Mr. and Mrs. J. H. Lovell, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mr. and Mrs. Shuford K. Peeler, Mrs. E. J. Presser, William Smith. (Notes: Some of the above were part-time participants and were not officially counted. Seen day before count, Ruby-crowned Kinglet. Seen about a mile outside count area on count day, **Pileated Woodpecker**; third sight record for Mecklenburg county, first seen by Lovells several weeks earlier. A good predatory bird count for this area. Heavy real estate development has ruined almost all of the favorable habitat in the north east sector of the area. The outstanding field work of Lee Jones almost boosted the count to last year's high although there were fewer active observers).

Eastover, S. C. (all points within a 15-mile diameter circle, center at Eastover as in former years; cultivated fields 33%. pasture 33%, residential 10%, deciduous and pine woods 14%, swampy areas around ponds 10%). April 25; 6:00 AM to 5:00 PM. Cloudy and still; temp. 58° to 80°; relative humidity 79%, no wind. Two observers in one party. Total party-hours 9 (1 on foot, 8 by car); total party-miles 25 (1 on foot, 24 by car). Pied-billed Grebe, 2; **Cattle Egret**, 16; Common Egret, 1; Mallard, 1; Wood Duck, 3; Blue-winged Teal, 6; Turkey Vulture, 1; Black Vulture, 13; Red-shouldered Hawk. 1; Osprey, 2; Bobwhite, 14; **Sora**, 1; American Coot, 1; Common Snipe, 1; Spotted Sandpiper, 6; Solitary Sandpiper, 7; Greater Yellowlegs, 2; Lesser Yellowlegs, 6; Least Sandpiper, 3; Mourning Dove, 17; Chimney Swift, 5; Ruby-throated Hummingbird, 6; Belted Kingfisher, 2; Yellow-shafted Flicker, 1; Pileated Woodpecker, 1; Red-bellied Woodpecker, 3; Red-headed Woodpecker, 2; Downy Woodpecker, 4; Eastern Kingbird, 22; Great Crested Flycatcher, 1; Acadian Flycatcher, 2; Tree Swallow, 2; Rough-winged Swallow, 1; Barn Swallow, 2; Blue Jay, 28; Common Crow, 34; Carolina Chickadee, 2; Tufted Titmouse, 4; White-breasted Nuthatch, 1; Brown-headed Nuthatch, 1; Carolina Wren, 2; Mockingbird, 16; Catbird, 2; Brown Thrasher, 8; Wood Thrush, 2; Eastern Bluebird, 4; Blue-gray Gnatcatcher, 5; Ruby-crowned Kinglet, 1; Cedar Waxwing, 1; Loggerhead Shrike, 5; Starling, 18; White-eyed Vireo, 3; Yellow-throated Vireo, 1; Red-eyed Vireo, 5; Black-and-white Warbler, 1; Prothonotary Warbler, 4; Parula Warbler, 5; Yellow Warbler, 1; Myrtle Warbler, 12; Prairie Warbler, 4; Ovenbird, 1; Yellowthroat, 4; Hooded Warbler, 3; American Redstart, 3; House Sparrow, 41; Bobolink, 90; Eastern Meadowlark, 25; Redwinged Blackbird, 39; Orchard Oriole, 3; Rusty Blackbird, 40; **Brewer's Blackbird**, 8; Common Grackle, 29; Brown-headed Cowbird, 1; Scarlet Tanager, 1; Summer Tanager, 3; Cardinal, 21; Blue Grosbeak, 6; Indigo Bunting, 10; American Goldfinch, 9; Rufus-sided Towhee, 8; Savannah Sparrow, 11; Grasshopper Sparrow, 2; Chipping Sparrow, 13; Field Sparrow, 10; White-throated Sparrow, 7; Song Sparrow, 1. **Total** species, 86; total individuals, 717. Seen in count area the same week: Painted Bunting, 1; Yellow-billed Cuckoo, 1; Cattle Egret, 26; Winter Wren, 1; Chuck-will's-widow calling.—Kay Curtis Sisson, Annie Rivers Faver (compiler).

Fayetteville, N. C. (area, 7½ mile radius, centering just north of city on Raleigh Road, deciduous-pine woods, lakes and ponds, open field and farm land, city lawns). May 6, 5:30 AM to 6:30 PM. Hot, dry and sunny, whole area parched by drought, temp. 75° to 95°. Total observers 15, in five party groups. Total party hours, 30; total individual hours, 117; total party miles, 175 (car, 161; foot, 14). Mallard, 11; Wood Duck, 14; Turkey Vulture, 2; Sharp-shinned Hawk, 1; Red-tailed Hawk, 1; Red-shouldered Hawk, 1; Osprey, 1; Bobwhite, 63; Killdeer, 1; Spotted Sandpiper, 3; Lesser Yellowlegs, 3; Least Sandpiper, 3; Mourning Dove, 120; Yellow-billed Cuckoo, 1; Black-billed Cuckoo, 1; Barred Owl, 3; Chuck-will's-widow, 3; Nighthawk, 3; Chimney Swift, 45; Ruby-throated Hummingbird, 3; Belted Kingfisher, 3; Yellow-shafted Flicker, 19; Red-bellied Woodpecker, 27; Red-headed Woodpecker, 15; Hairy Woodpecker, 2; Downy Woodpecker, 14; Red-cockaded Woodpecker, 2; Eastern Kingbird, 35; Crested Flycatcher, 30; Acadian Flycatcher, 8; Wood Pewee, 35; **Horned Lark**, 2; Rough-winged Swallow, 2; Purple Martin, 6; Blue Jay, 129; Common Crow, 37; Carolina Chickadee, 23; Tufted Titmouse, 30; White-breasted Nuthatch, 2; Brown-headed Nuthatch, 4; Carolina Wren, 32; Mockingbird, 70; Catbird, 29; Brown Thrasher, 64; Robin, 88; Wood Thrush, 43; Eastern Bluebird, 1; Blue-gray Gnatcatcher, 8; Ruby-crowned Kinglet, 5; Cedar Waxwing, 31; Loggerhead Shrike, 29; Starling, 355; White-eyed Vireo, 16; Yellow-throated Vireo, 6; Red-eyed Vireo, 53; Prothonotary Warbler, 9; Parula Warbler, 15; Yellow Warbler, 1; Magnolia Warbler, 1; Black-throated Blue Warbler, 8; Myrtle Warbler, 18; Yellow-throated Warbler, 4; Blackpoll Warbler, 3; Pine Warbler, 9; Prairie Warbler, 9; Ovenbird, 1; Northern Waterthrush, 2; Louisiana Waterthrush, 7; Yellowthroat, 21; Yellow-breasted Chat, 2; Hooded Warbler, 9; American Redstart, 7; House Sparrow, 240; Eastern Meadowlark, 101; Red-winged Blackbird, 82; Orchard Oriole, 23; Baltimore Oriole, 2; Rusty Blackbird, 25; Common Grackle, 135; Brown-headed Cowbird, 35; Summer Tanager, 45; Cardinal, 99; Blue Grosbeak, 14; Indigo Bunting, 4; **Evening Grosbeak**, 2; American Goldfinch, 29; Rufous-sided Towhee, 45; Chipping Sparrow, 26; **White-crowned Sparrow**, 1; White-throated Sparrow, 9; Song Sparrow, 1. **Total** species, 91; total individuals, 1019, (Seen during week but not recorded on day of Count: **Cattle Egret** (May 5), Black Vulture, Barn Swallow, Palm Warbler, Scarlet Tanager, Field Sparrow.—Mrs. L. E. Whitfield, Mrs. Chester Williams, Mrs. John Oates, Mrs. J. A. Shaw, Mrs. Sam Rankin, Mrs. N. A. Currie, Jr., Mrs. J. E. Courtney, Mrs. R. M. Lilly, Mrs. Charles T. Haigh, Mrs. Charles T. Haigh, Jr., Mrs. Roscoe Hauser, Jr. (compiler), Miss Helen McGeachy, Miss Lillie Poe, Mr. Henry Rankin, Miss Catsie Huske (President).

Greensboro, N. C. (area same as in Christmas Counts, centering ½ mile SW of WBIG transmitter).—May 5; 4 AM to 7 PM. Partly cloudy to clear; temp. 54° to 82°; wind NE, 7-15 mph. Twenty-seven observers in 8 parties. Total party hours, 90½; total party miles, 348 (305 by car 43 by foot). Common Loon, 1; Great Blue Heron, 6; Green Heron, 5; Mallard, 4; Blue-winged Teal, 9; Wood Duck, 22; Lesser Scaup, 3; Turkey Vulture, 13; Black Vulture, 2; Red-tailed Hawk, 4; Broad-winged Hawk, 3; Osprey, 1; Bobwhite, 113; American Coot, 2; Killdeer, 6; Common Snipe, 3; Spotted Sandpiper, 17; Solitary Sandpiper, 13; Greater Yellowlegs, 9; Lesser Yellowlegs, 11; Semipalmated Sandpiper, 1; Ring-billed Gull, 14; Mourning Dove, 156; Yellow-billed Cuckoo, 9; Black-billed Cuckoo, 1; Barn Owl, 1; Barred Owl, 4; Whip-poor-will, 14; Common Nighthawk, 17; Chimney Swift, 94; Ruby-throated Hummingbird, 11; Belted Kingfisher, 4; Yellow-shafted Flicker, 42; Pileated Woodpecker, 2; Red-bellied Woodpecker, 56; Red-headed Woodpecker, 12; Yellow-bellied Sapsucker, 3; Hairy Woodpecker, 3; Downy Woodpecker, 28; Eastern Kingbird 18; Great Crested Flycatcher, 43; Eastern Phoebe, 25; Acadian Flycatcher, 18; Eastern Wood Pewee, 26; Horned Lark, 4; Tree Swallow 6; Bank Swallow, 5; Rough-winged Swallow, 13; Barn Swallow, 22; Purple Martin, 17; Blue Jay, 130; Common Crow, 104; Carolina Chickadee, 98; Tufted Titmouse, 79; White-breasted Nuthatch, 30; Brown-Headed Nuthatch, 18; House Wren, 21; Carolina Wren, 30; Mockingbird, 197; Catbird, 72; Brown Thrasher, 50; Robin, 193; Wood Thrush, 165; Hermit Thrush, 1; Swainson's Thrush, 48; Gray-cheeked Thrush, 2; Veery, 6; Eastern Bluebird, 9; Blue-gray Gnatcatcher, 57; Cedar Waxwing, 63; Loggerhead Shrike, 24; Starling, 529; White-eyed Vireo, 31; Yellow-throated Vireo, 37; Solitary Vireo, 1; Red-eyed Vireo, 108; Black-and-white Warbler, 12; Prothonotary Warbler, 10; Worm-eating Warbler, 4; Parula Warbler, 23; Yellow Warbler, 27; Magnolia Warbler, 3; Cape May Warbler, 2; Black-throated Blue Warbler, 8; Myrtle Warbler, 78; Black-throated Green Warbler, 2; Yellow-throated Warbler, 16; Blackpoll Warbler 1; Pine Warbler 15; Prairie Warbler, 36; Ovenbird, 79; Northern Waterthrush, 3; Louisiana Waterthrush, 8; Kentucky Warbler, 12; Yellowthroat, 102; Yellow-breasted Chat, 47; Hooded Warbler, 39; Canada Warbler, 1; American Redstart, 42; House Sparrow, 483; Bobolink, 425; Eastern Meadowlark, 145; Redwinged Blackbird, 231; Orchard Oriole, 18; Baltimore Oriole, 8; Common Grackle, 272; Brown-headed Cowbird, 47; Scarlet Tanager, 15; Summer Tanager, 35; Cardinal, 235; Rose-breasted Grosbeak, 2; Blue Grosbeak, 20; Indigo Bunting, 57; Pine Siskin, 56; American Goldfinch, 109; Rufous-sided Towhee, 121; Savannah Sparrow, 1; Grasshopper Sparrow, 25; Bachman's Sparrow, 1; Chipping Sparrow, 67; Field Sparrow, 42; **White-crowned Sparrow**, 3; White-throated Sparrow, 48; Song Sparrow, 61. Total species, 124; total individuals, 6,280.—Mrs. David Cason, Mrs. Ellene Cobb, Inez Coldwell, Larry Crawford, Kelly Culbreth, Mr. & Mrs. G. W. Daniels, Charlotte Dawley, Brad Hawkins (compiler), Mrs. J. L. Hege, Bruce Kappel, Robert Lasley, Mrs. Robert McCoy, Ethel McNairy, Dr. & Mrs. F. McNutt, Ida Mitchell, Elizabeth Ogburn, Mr. & Mrs. George Perrett, Mrs. C. Prince, Mr. & Mrs. C. I. Reed, Etta Schiffman, George Smith, Thomas Street. (The Piedmont Bird Club)

Henderson, N. C. (area included all points within a 15-mile diameter circle, center 1 mile north of Henderson on Highway 39, wooded area near streams, 30%, back yard 10%, lake front 20%, meadows 40%).—May 5; 7 AM to 4 PM.—Pleasant; temp. 60° to 76°; wind about 8 mph. Ten observers; party data not given. Common Loon, 1; Great Blue Heron, 2; Turkey Vulture, 2; Red-shouldered Hawk, 1; Osprey, 1; Bobwhite, 17; **Upland Plover**, 1; Spotted Sandpiper, 3; Mourning Dove, 17; Whip-poor-will, 4; Chimney Swift, 18; Ruby-throated Hummingbird, 2; Belted Kingfisher, 3; Yellow-shafted Flicker, 6; Red-bellied Woodpecker, 3; Hairy Woodpecker, 2; Downy Woodpecker, 4; Eastern Kingbird, 16; Great Crested Flycatcher, 8; Eastern Phoebe, 3; Acadian Flycatcher, 7; Eastern Wood Pewee, 5; Tree Swallow, 2; Rough-winged Swallow, 2; Barn Swallow, 1; Blue Jay, 22; Common Crow, 11; Carolina Chickadee, 5; Tufted Titmouse, 10; White-breasted Nuthatch, 1; House Wren, 2; Carolina Wren, 4; Mockingbird, 28; Catbird, 10; Brown Thrasher, 11; Robin, 21; Wood Thrush, 12; Eastern Bluebird, 4; Blue-gray Gnatcatcher, 8; Ruby-crowned Kinglet, 2; Loggerhead Shrike, 10; Starling, 200; White-eyed Vireo, 12; Yellow-throated Vireo, 5; Red-eyed Vireo, 25; Black-and-white Warbler, 2; Parula Warbler, 8; Yellow Warbler, 5; Black-throated Blue Warbler, 2; Myrtle Warbler, 35; Yellow-throated Warbler, 2; Chestnut-sided Warbler, 1; Bay-breasted Warbler, 1; Blackpoll Warbler, 8; Pine Warbler, 10; Prairie Warbler, 26; Ovenbird, 9; Louisiana Waterthrush, 2; Kentucky Warbler, 5; Yellowthroat, 5; Yellow-breasted Chat, 10; Hooded Warbler, 10; **Canada Warbler**, 1; American Redstart, 26; House Sparrow, 30; Bobolink, 12; Eastern Meadowlark, 41; Red-winged Blackbird, 15; Orchard Oriole, 2; Common

Grackle, 6; Brown-headed Cowbird, 12; Scarlet Tanager, 1; Summer Tanager, 11; Cardinal, 24; Rose-breasted Grosbeak, 4; Blue Grosbeak, 1; Indigo Bunting, 12; **Evening Grosbeak,** 1; American Goldfinch, 40; Rufous-sided Towhee, 16; Savannah Sparrow, 1; Chipping Sparrow, 12; Field Sparrow, 6; White-throated Sparrow, 4; Swamp Sparrow, 2. **Total** species, 85; total individuals, 965. (Seen in the area on May 6: Chestnut-sided Warbler, 1; White-breasted Nuthatch, 1; on May 7: Bay-breasted Warbler, 1).—Mr. and Mrs. A. W. Bachman, Mr. and Mrs. James Blalock, Mr. and Mrs. Fred Conderman, Mr. and Mrs. J. A. Meadows, Mariel Gary (compiler), Garnette Myers.

Jefferson, N. C. (area centers at Hurt's farmhouse in Nathan's Creek community as in former years).—May 6; 6:30 AM to 6:30 PM Clear; temp. 62° to 65°. Seven observers in two parties. Total party-hours, 18 (16½ on foot, 1½ by car); total party-miles, 41 (22 on foot, 19 by car). **Louisiana Heron,** 1; Turkey Vulture, 2; **Ruffed Grouse.** 1; Bobwhite, 1; **Spotted Sandpiper,** 1; Mourning Dove, 1; Whip-poor-will, 1; Chimney Swift, 13; Ruby-throated Hummingbird, 5; Yellow-shafted Flicker, 8; Pileated Woodpecker, 1; **Red-bellied Woodpecker,** 1; **Hairy Woodpecker,** 2; Downy Woodpecker, 18; Eastern Kingbird, 7; Great Crested Flycatcher, 8; Eastern Phoebe, 12; Least Flycatcher, 6; Eastern Wood Pewee, 4; **Horned Lark,** 1; Bank Swallow, 1; Rough-winged Swallow, 12; Barn Swallow, 27; Cliff Swallow, 5; Blue Jay, 21; Common Crow, 29; Carolina Chickadee, 5; Tufted Titmouse, 10; White-breasted Nuthatch, 6; House Wren, 13; Carolina Wren, 2; Catbird, 30; Brown Thrasher, 15; Robin, 15; Wood Thrush, 4; Eastern Bluebird, 10; Blue-gray Gnatcatcher, 8; Starling, 12; Yellow-throated Vireo, 6; Red-eyed Vireo, 4; **Warbling Vireo,** 1; Black-and-white Warbler, 10; Yellow Warbler, 21; Myrtle Warbler, 11; Chestnut-sided Warbler, 2; Ovenbird, 4; Yellowthroat, 2; Yellow-breasted Chat, 8; Hooded Warbler, 1; **Wilson's Warbler,** 2; American Redstart, 4; House Sparrow, 63; Eastern Meadowlark, 3; Red-winged Blackbird, 38; Orchard Oriole, 3; Baltimore Oriole, 20; Common Grackle, 17; Brown-headed Cowbird, 12; Scarlet Tanager, 14; Cardinal, 24; **Rose-breasted Grosbeak,** 4; Indigo Bunting, 25; American Goldfinch, 5; Rufous-sided Towhee, 15; **Grasshopper Sparrow,** 6; Vesper Sparrow, 4; Chipping Sparrow, 35; Field Sparrow, 14; White-throated Sparrow, 14; Song Sparrow, 26. **Total** species, 70; total individuals, 737. Making our count run higher last year was a large number of Chimney Swifts around the flues at Ashe Central School. None was there this year. The Ruffed Grouse had a nest of 16 eggs. Nest was observed before count. After count day incubation was found to be a success. Seen in area during week before count: Yellow-billed Cuckoo, 1, Black-billed Cuckoo, 1, Acadian Flycatcher, 1, seen during week after count: Bay-breasted Warbler, 1; Blackpoll Warbler, 1; Palm Warbler, 1; Bobolink, 71; **Dickcissel,** 1.—Mr. and Mrs. Phil Eckman, Mrs. A. B. Hurt (compiler). Mrs Beulah Kiser, Alice Lyall, Truitt Weaver, Mike Welch.

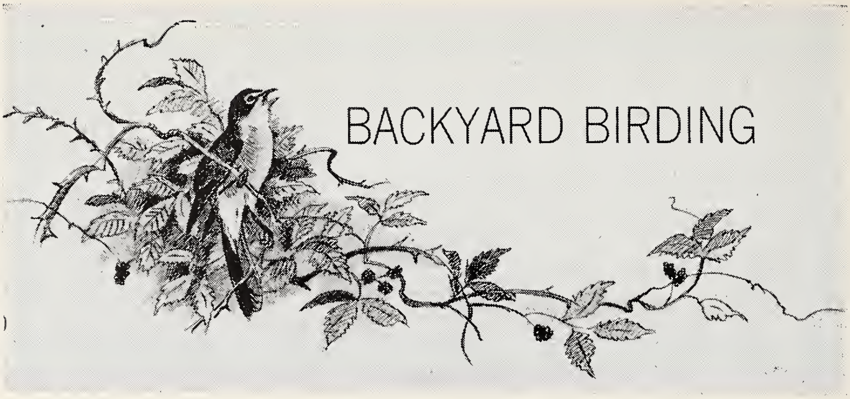
New London, Stanly County, N. C. (area included a 15-mile diameter circle centered about two miles northwest of Badin, open fields 40%, ponds and lakes 15%, mixed woods and hedges 25%, city lawns 20%). April 28, 5 AM to 7 PM. Sky overcast, later clearing; temp. 60° to 82°; wind SE 2 mph in the afternoon. Six observers in four parties. Total party-hours, 72 (37½ on foot, 34½ by car); total party-miles, 356. Great Blue Heron, 1; Blue-winged Teal, 1; Green Heron, 1; Wood Duck, 3; Turkey Vulture, 15; Black Vulture, 1; Red-tailed Hawk, 4; Red-shouldered Hawk, 2; Sparrow Hawk, 2; Bobwhite, 58; Killdeer, 16; Common Snipe, 4; Spotted Sandpiper, 6; Ring-billed Gull, 7; Mourning Dove, 44; Yellow-billed Cuckoo, 3; Screech Owl, 1; Great Horned Owl, 1; Whip-poor-will, 3; Chimney Swift, 55; Ruby-throated Hummingbird, 7; Belted Kingfisher, 1; Yellow-shafted Flicker, 31; Red-bellied Woodpecker, 14; Red-headed Woodpecker, 3; Yellow-bellied Sapsucker, 3; Hairy Woodpecker, 4; Downy Woodpecker, 18; **Red-cockaded Woodpecker,** 1; Eastern Kingbird, 14; Great Crested Flycatcher, 22; Eastern

Phoebe, 20; Acadian Flycatcher, 2; Eastern Wood Pewee, 20; Horned Lark, 4; Tree Swallow, 1; Rough-winged Swallow, 16; Barn Swallow, 9; Blue Jay, 181; Common Crow, 50; Carolina Chickadee, 52; Tufted Titmouse, 54; White-breasted Nuthatch, 2; Brown-headed Nuthatch, 9; **Brown Creeper**, 1; House Wren, 4; Carolina Wren, 50; Mockingbird, 120; Catbird, 15; Brown Thrasher, 60; Robin, 116; Wood Thrush, 61; Eastern Bluebird, 26; Blue-gray Gnatcatcher, 13; Ruby-crowned Kinglet, 4; Cedar Waxwing, 92; Loggerhead Shrike, 33; Starling, 123; White-eyed Vireo, 37; Yellow-throated Vireo, 9; Red-eyed Vireo, 40; Black-and-white Warbler, 6; Prothonotary Warbler, 1; **Blue-winged Warbler**, 1; (JUW, VW) Parula Warbler, 1; Yellow Warbler, 10; Myrtle Warbler, 40; Black-throated Green Warbler, 1; Yellow-throated Warbler, 6; Pine Warbler, 23; Prairie Warbler, 37; Palm Warbler, 1; Ovenbird, 1; Louisiana Waterthrush, 5; Kentucky Warbler, 1; Yellowthroat, 27; Yellow-breasted Chat, 6; Hooded Warbler, 4; American Redstart, 7; House Sparrow, 578; Bobolink, 2; Eastern Meadowlark, 139; Redwinged Blackbird, 169; Orchard Oriole, 10; Common Grackle, 51; Brown-headed Cowbird, 17; Scarlet Tanager, 1; Summer Tanager, 31; Cardinal, 218; **Rose-breasted Grosbeak**, 1; Blue Grosbeak, 5; Indigo Bunting, 10; **Evening Grosbeak**, 121; Purple Finch, 10; Pine Siskin, 17; American Goldfinch, 311; Rufous-sided Towhee, 32; Savannah Sparrow, 1; Grasshopper Sparrow, 22; Slate-colored Junco, 2; Chipping Sparrow, 183; Field Sparrow, 33; White-throated Sparrow, 102; Swamp Sparrow, 2; Song Sparrow, 1. **Total** species, 104; total individuals, 4130. —Mrs. Barrett Crook (compiler), Mrs. John Whitlock, Ervin Poplin, Donald Maner, G. M. Hathcock, Mrs. L. A. Price, Mr. and Mrs. Wade Crowell, P. E. Book, Mrs. Ruth Kearns, Mrs. William Mount, Mrs. George Pickler, Mrs. Myrtle Isenhour, Mrs. John Crawley, Mrs. Jim Thompson, Spencer Plyler, Paine Misenheimer, George Culp, Miss Vera Mason, Allen Culp, B. B. Venters, Mrs. Claude Hinson, Miss Bennie Winget, Mr. and Mrs. S. R. Boyce, Barrett Crook, John U. Whitlock, Roy Blalock, Mrs. Kemp Littleton.

Raleigh, N. C. (area same as in Christmas Counts).—May 4; Clear most of day, partly cloudy in late PM; calm; temp. 45°-80°; other data not given. Turkey Vulture, 6; Red-tailed Hawk, 2; Sparrow Hawk, 2; Bobwhite, 45; Killdeer, 4; Spotted Sandpiper, 1; Greater Yellowlegs, 1; Whip-poor-will, 1; Nighthawk, 6; Chimney Swift, 25; Ruby-throated Hummingbird, 2; Belted Kingfisher, 1; Yellow-shafted Flicker, 16; Red-bellied Woodpecker, 6; Red-headed Woodpecker, 4; Hairy Woodpecker, 1; Downy Woodpecker, 3; King Bird, 2; Great Crested Flycatcher, 8; Eastern Phoebe, 2; Acadian Flycatcher, 2; **Least Flycatcher**, 1; Eastern Wood Pewee, 6; Tree Swallow, 4; Rough-winged Swallow, 12; Barn Swallow, 16; Purple Martin, 16; Blue Jay, 58; Common Crow, 20; Carolina Chickadee, 6; Tufted Titmouse, 12; Brown-headed Nuthatch, 2; House Wren, 2; Carolina Wren, 18; Mockingbird, 36; Catbird, 10; Brown Thrasher, 12; Robin, 35; Wood Thrush, 18; Hermit Thrush, 2; Eastern Bluebird, 2; Blue-gray Gnatcatcher, 2; Loggerhead Shrike, 6; Starling, 1200; White-eyed Vireo, 6; Yellow-throated Vireo, 2; Red-eyed Vireo, 12; Black-and-white Warbler, 2; Parula Warbler, 2; Yellow Warbler, 2; Magnolia Warbler, 1; Black-throated Blue Warbler, 2; Myrtle Warbler, 8; Blackpoll Warbler, 2; Pine Warbler, 6; Prairie Warbler, 3; Ovenbird, 6; Kentucky Warbler, 2; Yellowthroat, 4; Yellow-breasted Chat, 10; Hooded Warbler, 4; American Redstart, 2; House Sparrow, 600; Bobolink, 150; Meadowlark, 60; Redwinged Blackbird, 250; Orchard Oriole, 6; Common Grackle, 10; Cowbird, 12; Scarlet Tanager, 2; Summer Tanager, 8; Cardinal, 45; Rose-breasted Grosbeak, 1; Blue Grosbeak, 6; Indigo Bunting, 12; **Dickcissel**, 1; American Goldfinch, 14; Rufous-sided Towhee, 25; Savannah Sparrow, 6; Grasshopper Sparrow, 2; Bachman's Sparrow, 2; Chipping Sparrow, 10; Field Sparrow, 36; White-throated Sparrow, 45; Swamp Sparrow, 4; Song Sparrow, 6. **Total** species, 86; total individuals, 3025.—D. L. Wray (compiler), J. F. Greene, J. W. Johnson, Mrs. D. L. Wray, Steven Johnson.

Wilmington, N. C. (area same as in Christmas Counts; Carolina Beach and Orton Plantation not covered this year).—Apr. 28; 5:00 AM to 6:00 PM. Clear; temp. 55° to 74°; wind ENE 10 mph. Nine observers in four parties. Total party-hours 48; total party-miles 170 (18 on foot, 152 by car). Common Loon, 1; Brown Pelican, 4; Double-crested Cormorant, 6; Great Blue Heron, 5; Green Heron, 6; Little Blue Heron, 5; Cattle Egret, 4; Common Egret, 11; Snowy Egret, 8; Louisiana Heron, 1; Canada Goose, 50; Wood Duck, 2; Lesser Scaup, 21; Bufflehead, 1; Red-breasted Merganser, 1; Turkey Vulture, 1; Bald Eagle, 1; Osprey, 14; Bobwhite, 63; Clapper Rail, 23; Sora, 1; American Oystercatcher, 3; Semipalmated Plover, 127; Wilson's Plover, 10; Killdeer, 6; Black-bellied Plover, 61; Ruddy Turnstone, 1; Common Snipe, 1; Whimbrel, 7; Willet, 151; Greater Yellowlegs, 30; Lesser Yellowlegs, 3; Knot, 6; Dunlin, 125; Least Sandpiper, 2; Dowitcher sp., 20; Semipalmated Sandpiper, 12; Western Sandpiper, 3; Sanderling, 26; **Black-necked Stilt**, 1; Herring Gull, 150; Ring-billed Gull, 85; Laughing Gull, 35; Bonaparte's Gull, 1; Gull-billed Tern, 2; Forster's Tern, 7; Common Tern, 3; Least Tern, 126; Royal Tern, 8; Caspian Tern, 4; Black Skimmer, 35; Mourning Dove, 47; Yellow-billed Cuckoo, 6; Chimney Swift, 12; Ruby-throated Hummingbird, 3; Belted Kingfisher, 3; Yellow-shafted Flicker, 22; Red-bellied Woodpecker, 22; Red-headed Woodpecker, 38; Hairy Woodpecker, 1; Downy Woodpecker, 4; Red-cockaded Woodpecker, 9; Eastern Kingbird, 8; Great Crested Flycatcher, 24; Wood Pewee, 1; Tree Swallow, 350; Barn Swallow, 218; Purple Martin, 106; Blue Jay, 150; Common Crow, 20; Fish Crow, 52; Carolina Chickadee, 8; Tufted Titmouse, 18; Brown-headed Nuthatch, 30; Carolina Wren, 17; **Short-billed Marsh Wren**, 1; Long-billed Marsh Wren, 1; Mockingbird, 157; Catbird, 21; Brown Thrasher, 60; Robin, 3; Wood Thrush, 31; Hermit Thrush, 4; Eastern Bluebird, 7; Blue-gray Gnatcatcher, 7; Ruby-crowned Kinglet, 1; Cedar Waxwing, 48; Loggerhead Shrike, 6; Starling, 253; White-eyed Vireo, 11; Yellow-throated Vireo, 3; Red-eyed Vireo, 32; Black-and-white Warbler, 1; Prothonotary Warbler, 6; Parula Warbler, 60; Myrtle Warbler, 38; Black-throated Green Warbler, 1; Yellow-throated Warbler, 5; Pine Warbler, 9; Prairie Warbler, 15; Kentucky Warbler, 1; Yellowthroat, 25; Yellow-breasted Chat, 3; House Sparrow, 485; Eastern Meadowlark, 76; Redwinged Blackbird, 577; Orchard Oriole, 23; Baltimore Oriole, 1; Boat-tailed Grackle, 167; Common Grackle, 67; Brown-headed Cowbird, 8; Summer Tanager, 7; Cardinal, 224; Blue Grosbeak, 2; Indigo Bunting, 7; Painted Bunting, 23; American Goldfinch, 50; Rufous-sided Towhee, 89; Savannah Sparrow, 182; Grasshopper Sparrow, 2; Seaside Sparrow, 11; Slate-colored Junco, 2; Chipping Sparrow, 49; Field Sparrow, 5; White-throated Sparrow, 53; Swamp Sparrow, 2. **Total** species, 126; total individuals, 5359.—Mrs. Sam Alexander, Mrs. Sam Earle, Betty Everson, Mr. Harry Latimer, Polly Mebane (compiler), Mr. S. J. Moore, Mrs. S. J. Moore, Marie Vander Schalie, Mrs. Mary Urich.

Winston-Salem, N. C. (restricted Christmas Count area including City Lake, Washington Park, Reynolda, County Farm and Tanglewood Park).—May 12; 5:30 AM to 9:00 PM. Partly cloudy, temp. 58° to 75°; wind SE-E-NNE, 0-10 mph. Five observers in three parties. Total party-hours, 33 (25 on foot, 8 by car); total party-miles, 70 (15 on foot, 55 by car). Great Blue Heron, 1; Wood Duck, 23 (including 18 young); Lesser Scaup Duck, 1; Cooper's Hawk, 1; Red-shouldered Hawk, 1; Bobwhite, 22; **Ruddy Turnstone**, 1 (HC); Spotted Sandpiper, 3; Solitary Sandpiper, 1; Ring-billed Gull, 3; Mourning Dove, 28; Yellow-billed Cuckoo, 1; Great Horned Owl, 1; Barred Owl, 1; Whip-poor-will, 6; Robin, 75; Common Nighthawk, 10; Chimney Swift, 18; Ruby-throated Hummingbird, 1; Yellow-shafted Flicker, 9; Red-bellied Woodpecker, 6; Red-headed Woodpecker, 1; Downy Woodpecker, 5; Eastern Kingbird, 8; Great Crested Flycatcher, 5; Eastern Phoebe, 8; Acadian Flycatcher, 8; **Least Flycatcher**, 1; Eastern Wood Pewee, 13; Horned Lark, 1; Rough-winged Swallow, 1; Barn Swallow, 1; Cliff Swallow, 1; Purple Martin, 5; Blue Jay, 37; Common Crow, 26; Carolina Chickadee, 10; Tufted Titmouse, 20; White-breasted Nuthatch, 5; Brown-headed Nuthatch, 2; House Wren, 2; Carolina Wren, 11; Mockingbird, 40; Catbird, 23; Brown Thrasher, 23; Wood Thrush, 30; Swainson's Thrush, 18; **Veery**, 1; Eastern Bluebird, 4; Blue-gray Gnatcatcher, 5; Cedar Waxwing, 65; Loggerhead Shrike, 7; Starling, 105; White-eyed Vireo, 2; Red-eyed Vireo, 19; Black-and-white Warbler, 1; Parula Warbler, 10; Yellow Warbler, 4; Magnolia Warbler, 16; Black-throated Blue Warbler, 2; Myrtle Warbler, 15; Black-throated Green Warbler, 1; Yellow-throated Warbler, 1; Chestnut-sided Warbler, 2; Bay-breasted Warbler, 1; Pine Warbler, 2; Prairie Warbler, 9; Palm Warbler, 1; Ovenbird, 10; Yellowthroat, 13; Yellow-breasted Chat, 5; Hooded Warbler, 19, Canada Warbler, 6; American Redstart, 30, House Sparrow, 40; Eastern Meadowlark, 25; Redwinged Blackbird, 55; Orchard Oriole, 1; Common Grackle, 66; Brown-headed Cowbird, 3; Scarlet Tanager, 1; Summer Tanager, 4; Cardinal, 50; Rose-breasted Grosbeak, 1; Blue Grosbeak, 8; Indigo Bunting, 6; American Goldfinch, 10; Rufous-sided Towhee, 26; Grasshopper Sparrow, 1; Chipping Sparrow, 65; White-throated Sparrow, 6; Song Sparrow, 10. **Total** species, 91; total individuals, 1251.—L. Hartsell Cash, Charles M. Frost, Mr. and Mrs. Gardner Gidley, R. H. Witherington (compiler).



BACKYARD BIRDING

Sometimes gathering material for this department becomes quite a problem. Letters arrive just after the manuscript for the current issue has been sent in to the Editor. I have tried to keep the contents in accord with the time of the year, since we have spring, summer, fall, and winter issues. So, please submit material as soon as possible after receiving a *Chat.*

The following letter is of interest:

> We are an elderly couple who have always been interested in nature: birds, flowers and insects. We live in a large grove and I spent a good part of last summer on a cot under a very large maple tree. One afternoon I looked up as a Hummingbird lit on a limb about ten feet over my head. She was building a nest! She would put lint in the nest and pack it with her feet. The nest was about two-thirds done when I first saw her and we watched until the littles ones left. I have the nest here beside me as I write. It is a wonderful piece of work, only an inch in diameter and an inch tall. The cup for the eggs is only three-fourths of an inch across and one-half inch deep. It looks like a knot on a limb, and when the bird sat on the nest she turned her bill in line with the limb.

—MRS. FRANK LOVE, *Kenbridge, Virginia*

How many species of songbirds come to visit your feeders during the course of a year? If you do not know, begin this fall and keep a record. Mr. and Mrs. George Cathay, of Tryon, N. C. tell us that they are bird-watching all the time and that they fed sixty-two species at their feeding stations this past year. Can you top this?

This department would like reports on housing projects for Bluebirds and Purple Martins. Unless you intend to make a long paper and a detailed study on the results of offering the boxes, we would like to know about them for this section of your bulletin. I know of two yards in which two broods of Bluebirds were hatched and reared successfully. I really believe bluebirds fare better than martins, for there are very few houses or even gourds in this entire neighborhood. One home near a pond has many bird houses that were put up more or less for ornaments. Since they are quite high, they have been used by the martins, which like to feed over the water. Please, won't every reader who lives on a farm put up either a house or a pole of large gourds for martins before February? Martins arrive in early spring and like to find a home waiting for them.

Written into a report on Evening Grosbeaks sent the GFN department was an interesting account of an injured male bird that was cared for and nursed back to health by Miss Helen Keller Wintyen of Southern Pines, N. C. She wrote as follows:

April 6. This is the day I brought an injured male home, putting him in a screened pen out in a small enclosure . . . . wing, hurt; no tail; foot, hurt; side of neck, slightly torn. Able to eat, drink, and chirp.

April 16. From 8 AM until 2 PM a couple of other grosbeaks were eating with my injured male, which I let out of the wire pen for at least two hours a day to strengthen his wing. He could flutter, hop, drink and eat in a space of an 8′ x 10′ enclosure.

April 24. After the male had been out for two hours in the enclosure, I went to put him in his pen, but as always sort of urged him either to fly or flutter across the enclosure. This time, at 2:30, he did, and landed on the wall. From there he soared to the yard beyond and I followed him. He then went to a Carolina cherry tree in our back yard and perched there for some time. I decided that this was it, so I watched him until 7 that night and found that he had gone quite high, so I knew no cat could get him, and he then looked as though settled for the night. Early the next morning I went out, and the bird was gone.

From S. K. Patterson, CBC member from Concord, N. C., the following came to me as a clipping from the Concord *Tribune* for May 13, 1962:

The L. B. Preslar family, whose home is at 70 Glendale, watched the building of a robin nest and the hatching of the baby birds with interest. Preslar, in fact, took care in trimming the hedge not to touch that portion in which the nest was concealed. But a strange thing happened. Parent robins, usually so concerned about their young, disappeared, leaving the nestlings to fend for themselves.

"I don't know what happened to them," said Preslar, "whether they were killed or wehther one was killed and the other left. Or perhaps something drove or scared them away."

What was to happen to the baby robins, now deserted? The Preslars were concerned. But their concern was short lived, for a new set of parents moved in to take charge.

"And," said Preslar, "the adoptive parents were not robins, but *Cardinals!*

"A pair of cardinals just took over the job of raising those baby robins."

Following this same line of thought, Mrs. F. S. Price of Eastover told me recently that she had had in her yard an instance of a Mockingbird having adopted a baby Brown Thrasher, even though the parent thrashers were still living. The birds would come to pick up scraps of food around the pans she put in the yard containing food for her cats and dog. The mockingbirds had brought their fledglings and the young thrashers had come, too. Then the mockers began feeding the young thrasher and would chase the parent away. Possibly its own young had been lost or had grown up and gone away.

In the middle of winter, once years ago, I remembered standing at the kitchen window and watching the birds outside. It was cold and rainy and I had just put out fresh biscuit crumbs and grain on the window feeder. There was a ladder outside the other window. As I watched, a very dull-looking White-throated Sparrow flew in and perched on a step of the ladder. Suddenly a female Cardinal flew to the feeder, got some biscuit and hopped to the ladder near the sparrow. The sparrow immediately opened its beak and begged, and into its beak the cardinal popped the bread!

After having been absent from the meetings of CBC for several years, I was delighted when I was able to attend the Cashiers gathering. It was so wonderful to meet old friends and make so many new ones. A vacant spot was left unfilled when we realized that so many who had gathered with us in former years were not there. We looked in vain for first one and then another, only to be told that their names were not on the list. We really missed them, and hope that many will be back soon. After the close of the CBC session, Mrs. Sisson and I turned our car toward the Great Smoky Mountains on Sunday morning. We drove slowly, listening for warblers as we went. We kept riding and climbing, stopping when we saw something that attracted our attention. Finally, in the late evening, we arrived at the mountain-top home of Arthur Stupka near Gatlinburg, Tennessee. No one was at home, but . . . . taking over their bird-feeder were five or six male Brown-headed Cowbirds! To find them there amazed me. It made me wonder about the distribution and the nesting of Brown-headed Cowbirds in our two Carolinas. It may have been ordinary for them to have been there, and I just didn't know it. Will some interested persons inform me, please, if cowbirds are in your territory, in which months, and if there is any indication of nesting, and in which nests are their eggs found? The blackbirds that I have seen around cows during the summer here in the center of South Carolina have been all Starlings. But I will keep looking.—A. R. FAVER, *Dept. Editor, Eastover, S. C.*

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Cory's Shearwater off the South Carolina Coast.—On the morning of June 19, 1962, my family and I were trolling 23 miles off the Murrell's Inlet sea buoy, on a course of 120 degrees when we sighted a shearwater coming up on the stern of the boat, "Georgia May."

We watched the bird, with and without binoculars, for fully five minutes as it alternately wheeled and sailed downwind without a perceptible wing movement. We carefully checked all field marks and were satisfied that it was a Cory's Shearwater (*Puffinus diomedea*).

Again, on June 24, 1962, we were fishing approximately 7 miles due east of Pawley's Island, South Carolina, when we saw a Cory's Shearwater feeding with Royal Terns on menhaden over a school of king mackerel. This bird fished upwind part of the time and alternated gliding with flapping. It lit on the water and picked up a piece of menhaden cut up by the mackerel. The yellow color and the shape of its bill were plainly visible.

South Carolina Bird Life (Sprunt and Chamberlain, 1949) states that large numbers of Cory's Shearwaters were seen off the South Carolina coast during the summer of 1940 and that one was found dead on the Isle of Palms on August 11 of that year. The present June record appears to be early.—MRS. ELLISON D. SMITH, *1626 Shady Lane, Columbia, South Carolina, June 28, 1962.*

Cattle Egrets Feeding Behind a Plow.—Since the fall of 1960 the Cattle Egret (*Bubulcus ibis*) has been in Beaufort County, North Carolina officially (*Chat* 25:2,21, 1961). Confirmed reports have placed a few individuals in scattered spots at all seasons since that time.

Early in April questions began to arise in my classroom concerning the egrets, and, to stimulate interest, I located some pictures and put them on the main bulletin board. Then came several reports, one of which I checked out on April 17.

The afternoon was cold, cloudy, and windy, and we found the birds. They seemed more like "Tractor Egrets" than Cattle Egrets that day because they were accompanying gulls in fields that were being plowed. They would wait until the tractors nearly touched them, then fly up and light just behind the plow, picking at the grubs and sometimes a worm that was turned up. There were one to four in each field, and I counted 20 that afternoon in different places in the same area. During the next two weeks I had reports of the same behavior with as many as six egrets in one field. This is one of their many adaptabilities I have not seen mentioned in the little literature that is available to me.

As the weather warmed up the birds returned to the cattle, and I received reports of as many as 22 in one pasture and six in another, with individuals scattered in other places in our area.

I have discovered a Cattle Egret roosting place across the Pamlico River from my house, and plan to report upon the activities there soon. —GERALDINE COX, *Box 469, Washington, North Carolina, May 16, 1962.*

Cattle Egret Observations.—For the past few years I have been quite interested in the expansion in both numbers and range of the Cattle Egret (*Bubulcus ibis*). In the summer of 1960 a flock of these birds ranged with a herd of cattle at North River Marsh in Carteret County, near Beaufort, North Carolina. Their number was estimated at less than 50.

The following summer (1961) there were several flocks in the Morehead City-Beaufort, N. C., area. These egrets successfully nested on Starvation Island north of the causeway, where we banded 15 nestlings. On several occasions we counted 80 or more adult birds feeding with the cattle at the intersection of the Merrimon Road and the highway to Atlantic, N. C. These birds stayed in this area until the last week in September before migrating south.

In 1962, they arrived in the Fort Landing area of Tyrrell County, North Carolina, on April 24. An April 29, John Minges, Robert Rogers, and I saw 31 adults feeding with white-faced cattle in a pasture at Fort Landing. On the same afternoon we also saw 14 adults in a pasture between Creswell and Roper, in Washington County, and six adults with cattle between Plymouth and Jamesville in Martin County.

On April 30, 1962, Jim Formyduval saw a flock of 17 adults in a pasture three miles north of Roanoke Rapids, Halifax County. On May 2, Dr. Thomas Smithson, Dan Knight, and I discovered ten adults in a pasture at Woodville, in Bertie County.

Seeing these birds in so many different locations and the fact that they are being observed farther and farther inland seem to indicate that they are being forced to seek food away from the coast by the actual pressure of their expanded numbers.

On May 14, 1962, I saw a flock of 23 Cattle Egrets flying south over the Municipal Airport at Rocky Mount, N. C. These birds were flying in a loose "V" formation and continued to do so as long as I kept them in my 7 x 50 glasses.

On May 5, J. W. E. Joyner, Dan and Norma Knight, Harry T. Davis, and I saw a flock of approximately 75 adults wheel above and light among cattle near North River Marsh in Carteret County. On the same afternoon, at a point on Rt. 70, 2 miles north of Beaufort, this group saw three Cattle Egrets in company with approximately 100 Laughing Gulls, 70 Ring-billed Gulls, and 12 Herring Gulls, feeding in a freshly plowed field while a tractor was plowing less than 100 yards away. This we feel is an unusual behavior pattern on the part of these egrets and one which should be reported since it is the first time any of us have ever observed them feeding in a plowed field several miles from the nearest herd of cattle and competing for food with gulls.—JOHN L. THOMPSON, *Rocky Mount, North Carolina, May 16, 1962.*

A Cinnamon Teal on the Upper North Carolina Coast.—On April 22, 1962, F. S. Hespenheide and I carefully observed a Cinnamon Teal (*Anas cyanoptera*) with 7 x 35 binoculars and a 25 x Bausch and Lomb scope at a distance of 200 feet on a small pond in the central portion of the Great Marsh at Knotts Island in Currituck County, North Carolina. This western species was in company with two adult male Blue-winged Teal.

We studied the Cinnamon Teal for fifteen minutes and saw it again on our return trip from Knotts Island to the mainland. The entire bird was a dark rusty color. The blue patch of the wing that is listed in all field guides and texts was not visible on this bird. The eye was red. Both species of teal appeared to be about the same size. A number of other species were seen on this pond, including the following: a Virginia Rail, a Common Gallinule, a Greater Yellowlegs, a Lesser Yellowlegs, and a Least Sandpiper.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk 9, Virginia.* (The Cinnamon Teal has never been reported taken in North Carolina and as far as we know this is but the second sight record for the state, the first being at Lake Mattamuskeet in 1935 and recorded in *The Chat,* [1:51, 1937].—*Dept. Ed*).

Mockingbird Nesting in Watauga County, North Carolina.—A pair of Mockingbirds (*Mimus polyglottos*) have nested in the yard of Fred H. Brown, almost on top of the Blue Ridge. The site is less than one mile from Hwy. 421 and under five miles east of Boone, Watauga County, North Carolina. The nest was in a lilac bush. The young left it about June 18, 1962. So far as I know this is the first definite report of the nesting of the Mockingbird in the higher mountains of North Carolina.

In 83 years, half of them spent in Watauga County, I have seen a Mockingbird three times before this. All of those observations were at Boone between 1910 and 1920. On the first two occasions in different years, I saw a single bird for a few moments only. Then one summer a male spent several weeks around Boone. He was a fine performer. Repeatedly about noon he mimicked the Whip-poor-will as well as the bird himself could do it. I suspected that he had a mate with a nest in the neighborhood, but I did not find them.—ROY M. BROWN, *Route 2, Chapel Hill, North Carolina, June 25, 1962.*

Prothonotary Warbler at Elkin, North Carolina.—A letter from Linville Hendren dated May 3, 1962, reports that he and Earle Hodel observed a Prothonotary Warbler (*Protonotaria citrea*) in brilliant plumage on April 27, 1962, at a location about six miles west of Elkin, Surry Co., North Carolina. They watched the bird off and on for more than an hour and during a part of the time they were so close to it that glasses were not needed. It sang and fed close to the water at the edge of a small pond about one-half mile from the Yadkin River.

Although reports of the Prothonotary Warbler above the fall line in the Carolinas are scarce, it has been found nesting as high up on the Yadkin River as New London, Stanly Co., N. C., (*Chat* 15:58, 1951) and on the Catawba River in southwestern Mecklenburg County, N. C. (*Chat* 25:70, 1961).—B. RHETT CHAMBERLAIN, *Wadmalaw Island, South Carolina, July 5, 1962.*

Swainson's Warbler in the South Carolina Mountains.—On May 19, 1962, on the way to the CBC meeting at Cashiers I stopped at one of the recreation areas on Highway 107 in the Sumter National Forest. My wife and I heard several warblers singing: Chestnut-sided, Black-throated Blue, Blackburnian, and one which sounded like a Hooded Warbler. The first three notes of this song were different from the Hooded's, however. They had only a slight slur and were sung on an even or slightly falling pitch. The final phrases of the song had the same "whip-up" sound that characterizes the song of the Hooded.

A short walk down a rhododendron-covered slope to a stream and up the other side to a large white pine brought me directly under the bird. Its song seemed unusually loud. It was quite a surprise to locate a singing Swainson's Warbler (*Limnothlypis swainsonii*).

Later in the morning I returned from Cashiers with Mr. Ellison Williams in hopes of confirming my identification. He is credited with being the first to find the Swainson's Warbler in its mountain habitat, a discovery made in Tryon, N. C. At the recreation area, about a half-mile inside the

South Carolina line, we were fortunate in hearing the bird sing right away. After a little while Mr. Williams maneuvred himself into position and had a good look at the bird. The look was unnecessary for identification as Mr. Williams had confirmed that the singer was a Swainson's Warbler as soon as he heard it.

It seemed to sing from certain perches, some of them up to twenty feet in the white pines, and seemed to be remaining in a restricted area. Both of these observations made one think that possibly the bird was on a breeding territory.

On May 30, Bill Grimm and I drove back up from Greenville and soon heard the bird again in the same area. Actually seeing it proved to be more difficult, but after an hour or so I was able to watch it as it fed and sang. It worked in the low shrubbery, sometimes darting briefly to the ground, but on other occasions flying up into the hemlocks and pines as high as twenty or thirty feet. Suddenly a second bird flew directly at the singer and the two darted away, twittering excitedly. The second bird may have been a Swainson's Warbler, too, for it was about the right size and color, but as my glimpse was very brief certain identification could not be made.

The Swainson's Warbler is said to occupy two disconnected and different habitats. The first, the coastal, is described as being restricted to canebreaks along those sluggish streams which wander into and through the pine-lands. The second is located in the mountains and is essentially thick rhododendron tangles, usually along streams but occasionally some distance from water. It seems to me that these two habitats of the Swainson's Warbler might not be so discontinuous as first appears. Along the Savannah River system nests have been located in the Augusta area and at Greenwood, and an individual bird was seen at Clemson in mid-August. These observations, published in *South Carolina Bird Life*, bring the known occurrences of the bird in summer right up to the edge of its mountain habitat.

The Sumter National Forest on either side of highway 107 should be of particular interest to South Carolina ornithology. On May 30 we heard again the Blackburnian Warbler in the same white pine where it had been on May 19. The Chestnut-sided Warblers were still singing. Bill Grimm pointed out that the song of the Black-throated Blue was different from those songs he had heard in Pennsylvania. The northern birds seem to sing "Zuider Zuider Zuider Zee," while our South Carolina bird restricted its first notes to one syllable which came out more like, "Zuiii Zuiii Zuiii Zee."

A final touch which added to the impression that we were observing birds in some northern woodland was provided when Bill drew my attention to the sound of a Ruffed Grouse drumming in the background.—JAMES B. SHULER, JR., *43 Kirkwood Lane, Greenville, S. C., June 20, 1962.*

Painted Buntings in the Carolinas in Midwinter.—The March, 1962 *Chat*, page 15, gives a detailed account of the capture of a fatally injured Painted Bunting (*Passerina ciris*) at Winnsboro, South Carolina, on December 22, 1961. The bird had flown into a plate glass window in the business section of the community. The specimen has been preserved.

On February 13, 1962, a male Painted Bunting appeared at the feeders of Mrs. W. L. Hunter at Fayetteville, North Carolina and continued to visit there regularly through February 17. It was in full adult plumage. On February 20 and 21, this bird was watched at other feeders in the general neighborhood, some of them over 1000 feet from the location where it was first seen and to which it had returned by February 25. It fed in company with Evening Grosbeaks and Purple Finches and ate small seed, corn meal mush, and suet.

At Mrs. Hunter's home the feeders are all close to the house (six to eight feet distant) in a small area completely concealed from above by foliage, so the bird had to discover it through the feeding of other birds.—Doris C. Hauser, *309 Sylvan Road, Fayetteville, N. C., February 28, 1962.*

Pine Grosbeaks in North Carolina.—The 1957 AOU Check-list does not indicate any location south of Virginia in the winter range of the Pine Grosbeak (*Pinicola enucleator*). In view of this the following observation is of interest.

On April 9, 1962, two male and three female Pine Grosbeaks were watched at length at Mt. Olive, Wayne County, North Carolina. They were first located and identified by Mrs. Milton Boone, who was kind enough to share her rare find with Mrs. J. J. Whitehurst, Mrs. James Davis, my husband, myself, and many others too numerous to enumerate. The birds seemed undisturbed at being watched all day by groups of people which at times were large enough to obstruct traffic on the nearby street. On the following day, April 10, only one of them—a male—could be found and that one was located by Mrs. Davis. They did not appear again.

There was a tornado on the day prior to finding the Pine Grosbeaks, and we cannot help wonder if this climatic condition might bear some relationship to the appearance of this species in this locality. In this regard, the birds did appear rather sluggish—almost as if dazed. (The U. S. Weather Bureau at Raleigh, N. C., recorded NNW winds reaching 28 mph, on April 8—*Dept. Ed.*)

I realize that it is customary to describe the field marks noted in the cases of finds of this degree of rarity, but the Pine Grosbeak is of such unique appearance as to almost preclude confusion with other species. I suppose its white wing bars and the pinkish color of its body are somewhat suggestive of the White-winged Crossbill, but the birds we saw were even larger than the Evening Grosbeaks with which they fed, and of course, the bill was that of a grosbeak and not a crossbill.—Mrs. Robert P. Holmes, II, *Mt. Olive, North Carolina, May 13, 1962.*

Additional Records of the Lincoln's Sparrow in South Carolina.—In the June, 1962, issue of *The Chat* (26: 45) there appeared a note by Mrs. Ellison D. Smith concerning the Lincoln's Sparrow (*Melospiza lincolnii*) in South Carolina. When this note was submitted, the editors and Mrs. Smith believed that hers was "the first known occurrence" of the bird in the state. Actually it was, but since that time three previously unpublished sight records have been called to our attention.

From Alexander Sprunt, Jr., we learned that a bird was "seen and studied at close range on the Beach Road, Bull's Island, December 27, 1949, by Alex Sprunt, 4th. Came to the "squeak" and all markings noted."

Dr. Robert A. Norris wrote that Dr. J. Fred Denton and a group from the Augusta (Ga.) Bird Club observed a single bird on November 21, 1954, at the pumping station of North Augusta, Aiken County, S. C. Later, on April 24, 1958, Dr. Norris recorded a bird, observed repeatedly at extremely close range, at the Savannah River Plant of the Atomic Energy Commission near Aiken, S. C.

Mrs. Smith's record, then, a dead bird picked up on November 7, 1961, at the base of a TV tower in Kershaw County, S. C., stands as the only known specimen from South Carolina.—David W. Johnston, *Editor, July 25, 1962.*

BOOK REVIEWS

Puffins. R. M. Lockley. Doubleday and Co., 575 Madison Ave., New York 22, N. Y. 240 pp. $1.25.

This paperback book is one of a series published in cooperation with the American Museum of Natural History. The stated purpose is to make "available in paperback format books of enduring interest in the life and earth sciences."

The puffins are intriguing birds in the family with auks and murres. There are two species in the genus *Fratercula* and one species in the genus *Lunda*. In the first are the Horned Puffins of the North Pacific and the Common Puffins of the North Atlantic. In the second genus, we have the Tufted Puffins, also of the North Pacific.

The writer of this book is an Englishman who has spent much time studying the Common Puffins in the eastern North Atlantic. The result is the most complete life history of these puffins. The writer's style and arrangement can be called both informal and attractive. As with many other birds the multitudes seen by early voyagers have been decimated, albeit to modest millions. Many tons have been used for human food, and man has introduced rats and other animals to destroy the birds in their nesting burrows. Waste oils cast upon the shipping waters have also destroyed these along with other sea birds.

In the Carolinas puffins are as distant as the North Atlantic in winter. Audubon, in *Birds of America* (1884), reports that he saw a good number of puffins in the mouth of the Savannah River, in Georgia, in the winter of 1831-32. More recent students give the coast of New Jersey as a southern limit.

Anyone desiring to read an interesting story of the intimate life of one of our most numerous sea birds will like this book.—HARRY T. DAVIS.

Alabama Birds. Thomas A. Imhof. 1962. University of Alabama Press, University, Alabama. 591 pp. $7.50.

In the years since 1924, Howell's memorable *Birds of Alabama* has stood as the definitive work on birds of the state, but with increased interest, observers, and records, it became necessary not only to bring records up-to-date but also to give a book on identification and life histories of Alabama birds which would have a more popular appeal. Although Imhof has spent many years studying birds in the state, the actual compilation of records and writing of the book extended from 1955 until 1961. With the publication of this attractive volume, Alabama joins the ranks of most of the Southern states in having a bird book particularly useful to Alabamians but of considerable value to ornithologists outside the state.

The attractive nature of any state bird book lies first in its illustrations, and the water-color paintings of land birds by Richard Parks plus the oil paintings of water birds by David Hulse contribute mightily to this work. Unfortunately size relationships among the water birds (a Pied-billed Grebe, for example, is shown to be about ⅔ as large as a Common Loon) detract from some otherwise attractive paintings. Richard Parks, especially, is to be congratulated upon his superb illustrations in which details, size relationships, and positions of birds are masterfully executed. In the copy which I have, some colors are not true, but this defect is probably attributed to engraving. There are also many excellent photographs of typical Alabama habitats where birds are commonly found.

The value of this book lies, of course, principally in the species' accounts. For each of the 352 species found in the state, the following information is usually given: common names, a general description of the bird and habitat distribution in the state, nesting, food, geographic range, occurrences (dates, numbers) in different regions, time of breeding, banding data, and a distribution map. This is, obviously, about all the information needed in a work of this sort. These species' accounts are generally quite good and adequate.

In reviewing any book, the reviewer can prepare a summary or a critique. In this instance, it seems desirable to quibble over certain features of the book, though perhaps these objections do not detract from its overall value. The book begins with a glossary, which contains some peculiar and misleading definitions (for example, cambium, clutch, and pectoral). In these days of high printing costs, I question the wisdom of devoting one-half a page to a picture of a bird bath. It is highly unlikely that (p. 30) reactivating of sex glands gives most birds the stimulus for migration, although the author's discussion of migration and attendant weather conditions is good. Finally, in a work of this sort I think it extremely unwise to include nesting and food data for extralimital species. For one thing, it is unnecessary and for another, this is the way by which errors can be perpetuated in the literature.

In spite of these objections, Imhof has done a fine job in compiling and presenting data on Alabama's birds. *Alabama Birds* is a significant publication which is a "must" in the library of all serious-minded students of Southern birds.—David W. Johnston

American Wildlife and Plants. A Guide to Wildlife Food Habits. Alexander G. Martin, Herbert S. Zim, and Arnold L. Nelson. Unabridged republication of 1st (1951) edition. Index. Hundreds of illustrations, tables, and range maps. 500 pp. Dover Publications, Inc., 180 Varick Street, New York 14, N. Y. Paperbound, $2.00.

Birds and their Attributes. Glover M. Allen. Unabridged reprint of the 1925 edition. 51 illustrations. 338 pp. Dover Publications, Inc. Paperbound, $1.85.

Dover Publications is to be congratulated and thanked for the reprinting of these two important works. *American Wildlife and Plants* is a compilation of researches, extending over about 75 years, on the food habits of birds, mammals, and other vertebrates. More than 1,000 species are discussed and for about 300 common species of birds and mammals the authors give detailed food habits, range, and a general description of the animal. Part I introduces the reader to general aspects of wildlife—crop (food) relationships. In Part II the animals and their foods are discussed in sections: waterbirds, songbirds, small mammal, etc. Part III includes plants useful to wildlife and is divided into woody plants, upland weeds, cultivated plants, etc. For the various species of plants, most of the birds and mammals (Part II) which use these plants or their products are listed.

This compact volumn, containing so many valuable data on food habits, is recommended for naturalists, foresters, ornithologists, and mammalogists.

When *Birds and their Attributes* first appeared, it was one of the first attempts to collate general information about birds and was widely considered "the best general introduction to birds." Though more modern researches have amended and expanded ideas submitted by Allen, most of the data are still quite usable. Chapter headings include the following: feathers, food, origin, eggs and nests flight and song, migration, and the like. The book is a readable, popular summary of the bird's place in nature.—David W. Johnston

Handbook of North American Birds. Volume I, edited by Ralph L. Palmer. Yale University Press. 567 pp. 1962. $15.00.

From the standpoint both of the week-end birdwatcher and the professional ornithologist, there has long been a need for a comprehensive compilation of data concerning the birdlife of America. Such a work is desirable not only to include information on birds which are relatively new to our shores, such as the Cattle Egret, but to bring up-to-date in one reference source the wealth of material which has accumulated on the all species. If the first volume of the *Handbook of North American Birds* is any indication, this new series of volumes should meet these needs and be the standard reference work on our birdlife for many years to come.

Covering almost the identical area covered by the A. O. U. "Checklist," the first volume includes the families from Loons through Flamingos. Of particular interest are the excellent maps showing the ranges of the individual species, these broken down to show breeding, winter, breeding and winter, and postbreeding dispersal ranges as well as areas in which the birds have been reported as stragglers. In addition to these maps there are a number of black-and-white illustrations showing courtship displays, feather differences, size comparisons, etc. The color illustrations by Roger Tory Peterson and Robert M. Mengel, particularly those comparing basic and breeding characteristics, are very well done and provide excellent reference points.

Information on particular species includes description, subspecies, field identification, voice, habitat, distribution, migration, banding status, reproduction, habits, and food. As an indication of the thoroughness of the work, the part dealing with description gives complete details of all plumages through the various molts and changes in the juvenal plumage until acquistion of the basic plumage.

While on the whole the book is excellent, it does seem that any work such as this which was sponsored partly by the American Ornithologists' Union should conform to the names approved by that body as published in its "Checklist." The Louisiana Heron, for instance, is called the Tricolored Heron, and the Common Egret is referred to as the Great Egret. It is to be hoped that future volumes will use the approved names in order to avoid confusion.

While this review may have given the impression that the volumes are too technical for the average birder to become involved with, such is certainly not the case. The information is well organized and is presented in a very clear and readable manner. This and succeeding volumes, while not particularly inexpensive, are well worth the money and should be included in the library of everyone interested in birds.—L. HARTSELL CASH.

BRIEFS FOR THE FILES

White Pelican, 1 present for several days, including January 18, at Bear Island Management Area, Colleton County, S. C., Donald K. Fortenbery • **Cattle Egret**, 8, feeding in pasture with cows, near Swansboro, N. C., June 15, H. G. Britt • **Black-crowned Night Heron**, 1 roosting in tall pines in residential area, Fayetteville, N. C., February 20-24, Doris C. Hauser. • **Fulvous Tree Duck**, 3, Magnolia Gardens, Charleston, April 28 (late), Theodore A. Beckett, III. • **Rough-legged Hawk**, 2, Beaufort County, N. C., December 31, 1961, Geraldine Cox, *et al.* • **Golden Eagle**, an adult female "found dead" in the Crabtree Gap section of Haywood County, N. C., about mid-March. Specimen preserved, Norme Frost. • **Marsh Hawk**, 1 Charlotte, May 5—a late date—the Shuford K. Peelers. • **Ruffed Grouse**, hen and small chick at shoulder of road on S. C. Route 107, 5 mi. west of Oconee State Park. June 27, W. D. Chamberlain, *et al.* • **Virginia Rail**, 1 flushed by bird dogs from marsh of the Hartwell Dam backwater, Anderson County, S. C., April 22, Mrs. R. C. Tedards. • **Common Gallinule**, 1 picked up dead during the first week of May at Winston-Salem and preserved, D. W. Johnston. • **Killdeer**, 99 counted February 24, the largest flock recorded in the North Wilkesboro area, Wendell P. Smith. • **Upland Plover**, 1, April 25 and 2, April 26, James Island, S. C., the R. H. Colemans; 33 at North Wilkesboro, April 8, Wendell P. Smith. • **White-rumped Sandpiper**, 1, Rantowles, S. C., June 10, R. H. Coleman and F. M. Weston. • **Marbled Godwit**, 1 on mudflats on Wadmalaw Island, S. C., May 12, N. A. Chamberlain. • An all-white gull, believed to be a **Glaucous Gull**, with some oil or tar stains on head and breast, at Davis, Carteret Co., N. C., February 19, Eugene Pond *fide* **H. T. Davis.** • **Great Horned Owl**, 1 young, unable to fly, found on ground near Charlotte, N. C., May 19, fed and released but did not survive, J. P. Hamilton; an adult, perched and in flight, Wadmalaw Island, S. C., May 13, B. R. and N. A. Chamberlain. • **Chuck-will's-widow**, heard at Hillsboro, N. C., May 24 (late), C. H. Blake. • **Eastern Kingbird**, partial albino with snow white head and body, some dark areas on wings and tail but white band on tail distinguishable, and bill yellow. Associated with normal Eastern Kingbird, May 5 and 6, Lake Raleigh, Raleigh, R. J Hader. • **Gray Kingbird**, 1, perched and catching insects at Hunting Island, Beaufort County, S. C., May 24, Mr. and Mrs. R. C. Tedards; 3 at golf course, Parris Island, Beaufort County, S. C., May 24, Roy Attaway; 1 on telephone wire near east end of Folly Island, S. C., June 15, F. M. Weston. • **Eastern Phoebe**, 1 with "robin red" breast, stained by red clay in nest under a bridge at the Hartwell Reservoir near Clemson, S. C., June 1, Gaston Gage. • **Traill's Flycatcher**, 1 at North Wilkesboro, N. C., May 8, Wendell P. Smith. • **Horned Lark**, 1 at airport at Anderson, S. C., feeding with Eastern Meadowlarks, April 21, Mrs. R. C. Tedards; a female feeding one flying young, June 9, Winston-Salem, N. C., D. W. Johnston. • **Barn Swallow**, a brood of flying young from nest under a bridge at Hartwell Reservoir near Clemson, S. C., June 25 (6 miles from last year's nesting site), Gaston Gage. • **House Wren**, 2 in yard at Clemson, S. C., June 28, Gaston Gage. • **Winter Wren**, 1, April 16, North Wilkesboro, N. C., Wendell P. Smith; 1 at Charlotte, N. C., April 26, Lee Jones. • **Catbird**, 1 at Charlotte, N. C. during June, giving an excellent imitation: "Chuck-will's" or "will's widow", but never heard to give the complete call, the J. R. Norwoods. • **Hermit Thrush**, 1, *singing* at Charlotte, May 21 and last seen there, May 28, Lee Jones. • **Gray-cheeked Thrush**, 1 at North Wilkesboro, May 30, Wendell P. Smith. • **Veery**, 1, Charlotte, May 12, Lee Jones. • **Cedar Waxwing**, 4 flying over Wake Forest campus, Winston-Salem, June 18, D. W. Johnston; in Charlotte yard almost daily through May 11, the J. R. Norwoods. • **Blackpoll Warbler**, 1 at Hillsboro, N. C. May 24, C. H. Blake; 1 at North Wilkesboro, May 28, Wendell P. Smith. • **Bobolink**, a good spring flight, ending May 18, when 2 were seen and heard, Wadmalaw

Island, S. C., B. R. Chamberlain. • **Scarlet Tanager**, male and female in yard at Clemson, S. C., June 24, Gaston Gage. • **Rose-breasted Grosbeak**, an immature male at a feeder at Bath, N. C., April 14 and 19, Wallace Worrall *fide* H. T. Davis; a female at Folly Island, S. C., associated with Blue Grosbeaks, April 25, the R. H. Colemans; and a male at Durham, N. C., May 3, Hallam Walker. • **Dickcissel**, a male in a grain field in company of Indigo Buntings and a pair of Blue Grosbeaks, May 12, Rocky Mount, N. C., Dan Knight *fide* H. T. Davis. • **Pine Siskin**, last noted at Charlotte, May 2, the J. R. Norwoods. • **Savannah Sparrow**, 2, in upper Charleston County, S. C., May 13, E. B. Chamberlain. • **Slate-colored Junco**, last reported at Charlotte, May 5, Lee Jones.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1962 unless otherwise shown.*

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

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Supporting	$5.00	Affiliated Club	$2.00

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The activities of the Club and the coverage of *The Chat* will grow in amount and quality as increased funds become available. Prompt payment of dues and the securing of new members are vital contributions open to everyone.

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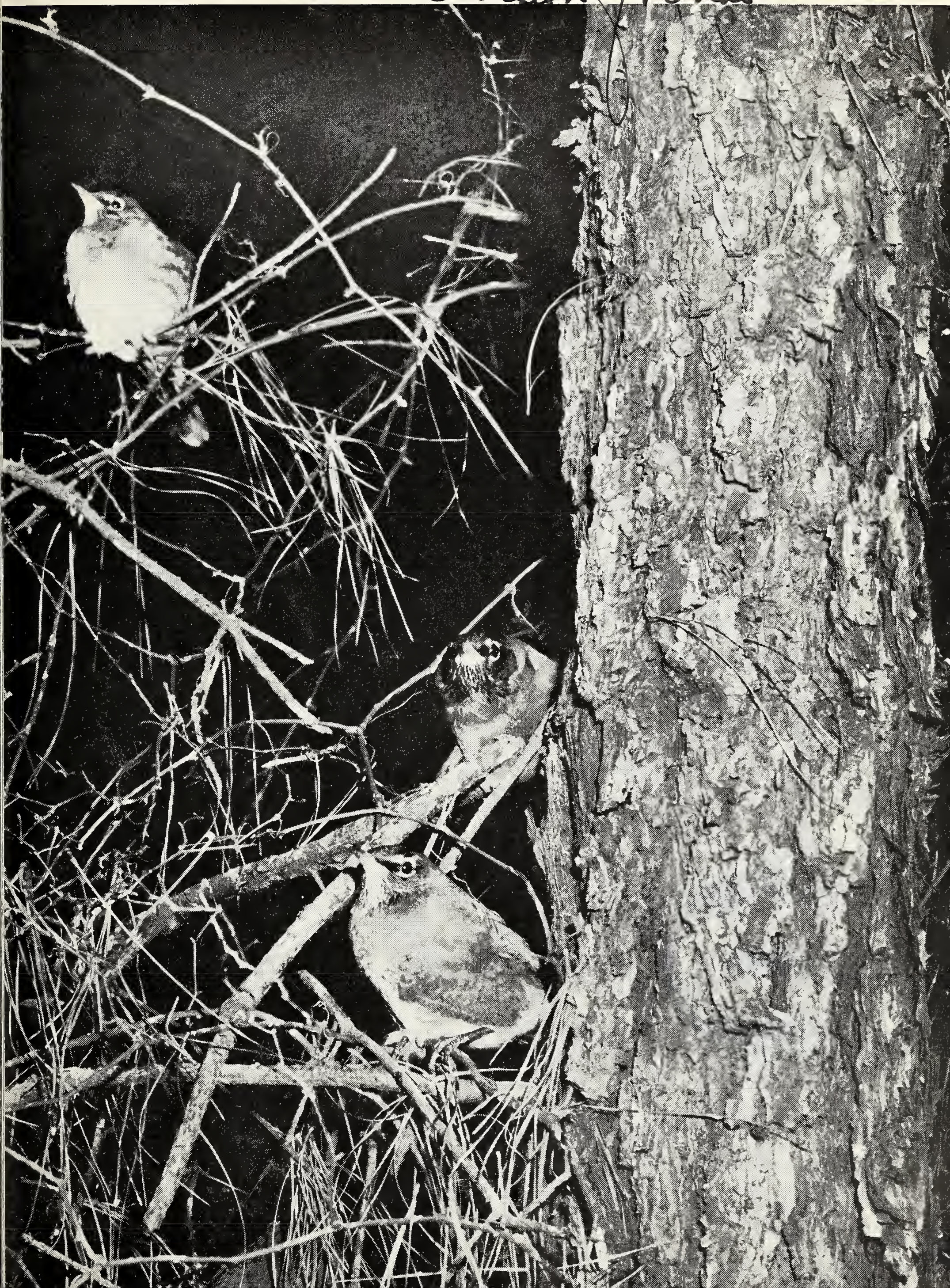

THE CHAT

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Editor: David W. Johnston, Department of Biology, Wake Forest College Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Rt. 1, Box 48, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Robins at a winter roost near Warrenton, N. C. Photographed by Jack Dermid.

NOCTURNAL MIGRANT MORTALITY IN THE CAROLINAS, SEPTEMBER, 1962

By David A. Adams

Introduction

Since the advent of airport ceilometers and television towers, ornithologists have had available to them a new and efficient method of studying bird migrations. The large numbers of nocturnal migrants killed at these structures provide samples "in the hand," unbiased by an observer's ability to find and identify birds in the field, permitting quantification impossible by any other means.

Although the factors affecting migration mortality of this sort have been studied by many authors (*e.g.*, Howell, Laskey, and Tanner, 1954; Johnston and Haines, 1957; Stoddard, 1962), the cause and effect relationships involved are far from understood. In general, small numbers of birds can be expected to be killed any night during migration; heavy mortality is usually associated with overcast or foggy nights and favorable winds (light northerly in the fall, light southerly in the spring).

Acknowledgments

This paper is a compilation of reports sent to me by other observers, to which I have added the data for Raleigh. For collecting and identifying the large numbers of specimens involved, I am indebted to the following: the personnel of WSJS-TV, Dr. David W. Johnston, and Bob Witherington (Winston-Salem); the personnel of WRAL-TV and William Craven (Raleigh); Drs. T. L. Quay and F. E. Hester and personnel of Seymour Johnson Air Force Base (Goldsboro); personnel of WIS-TV and Mrs. Vivian Smith (Columbia); and Edwin L. Blitch, III and B. Rhett Chamberlain (Charleston). Dr. Robert A. Norris, Tall Timbers Research Station, Tallahassee, Florida, assisted in identifying some of the Winston-Salem collection. Dr. David W. Johnston, Wake Forest College, suggested correlating the data from the September flight, and forwarded all reports to me.

Methods

Birds were collected during the period September 7-9 at the following locations (Figure 1):

Winston-Salem	WSJS-TV tower (692 feet high) atop Sauratown Mountain, Stokes County, 18 miles north of Winston-Salem, N. C. Smith Reynolds Airport ceilometer, Winston-Salem, Forsyth County, N. C.
Raleigh	WRAL-TV tower (1175 feet high), 9 miles southeast of Raleigh, Wake County, N. C.
Goldsboro	Seymour Johnson Air Force Base ceilometer, about 5 miles southeast of Goldsboro, Wayne County, N. C.
Columbia	WIS-TV tower (1600 feet high), 17 miles east of Columbia, Kershaw County, S. C.
Charleston	WCSC-TV tower (1047 feet high), 6 miles east of Charleston, Charleston County, S. C.

Weather

The weather situation responsible for the mass mortality experienced during the nights of September 6-7 and 7-8 first appeared on the weather map of September 1 as a small high-pressure area over the Alaskan peninsula. Twelve hours later, the cold air mass had enlarged and moved southward, lowering temperatures 20 degrees (compared to those of the preceding day) in parts of Alberta. Behind the leading edge of the front, which extended from southern Hudson's Bay to the United States-Canada border at the Pacific Ocean, winds were northerly, mostly less than 10 knots.

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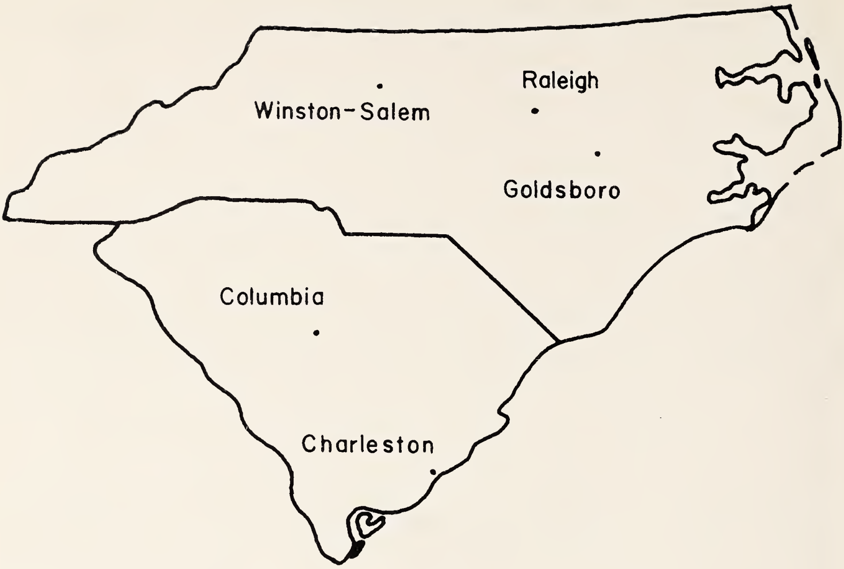

Figure 1. Localities from which reports of kills were received.

During September 3, the cold front extended across the northern plains, bringing low temperatures mostly in the 30's and northerly winds to 32 knots. At the same time, another weaker cold front was passing through the Carolinas, having little effect on the temperature here, but dropping temperatures in New England about 10 degrees from those of the preceding day.

During September 4 and 5, the major cold front continued to move across the prairie states, lowering temperatures into the 30's and 40's and bringing northerly winds from Lake Superior to Texas. At the same time, the previous cold front became stationary in the Carolinas, then began moving slowly northward as a weak warm front. Precipitation was occurring over most of the East except in the southeast coastal plain.

The weather map of September 6 at 1 AM showed temperatures to be 10 degrees colder than the previous day over an area from Lake Michigan south to western Tennessee and northeast to northern Vermont. Lows in this area were mostly in the 40's. Northerly winds and precipiation were occurring throughout the eastern United States east of the Mississippi River except in the southern Atlantic Coastal Plain.

At 1 AM on September 7, the night of the big kill, the cold front was becoming stationary over the Gulf Coast. Cloudiness with precipitation prevailed over almost all of the Southeast. By now, the northerly wind pattern which had dominated a large area just behind the front was beginning to break up and winds were becoming light and variable. Temperatures were dropping in the Carolinas, with most stations reporting at least ten degrees cooler than the previous day.

Variable, mostly northeast winds continued over the Carolinas during the following day and night, September 8. By now the cold, high-pressure area was centered over southern New Jersey and southeast winds were occurring throughout most of the midwest. Cloudiness and precipitation continued in the Southeast.

By 1 AM on September 9, most of the effects of the front had been felt and a gentle warming trend was evident. Skies were clearing over the Carolinas, but rain continued in Georgia, Tennessee, Alabama, and Florida.

Results

Winston-Salem

Personnel of WSJS-TV picked up 86 individuals of 25 species from grassy areas and a parking lot adjacent to the tower early on the morning of September 7. Rough terrain precluded any attempt to recover all the birds killed and no estimate of the proportion recovered was given.

The Smith Reynolds airport ceilometer was turned off at 2:30 AM, September 7 after the weatherman noticed birds being killed. One Red Bat and 862 birds were collected that morning; 27 additional specimens were picked up the following morning.

Raleigh

All birds were collected on the morning of September 7. No mortality was reported by tower personnel the following morning.

Goldsboro

Birds were first observed in the ceilometer at 10:00 PM on September 6. The first mortality was reported to the airport weather station at 1 AM on September 7. By 2 AM of that day "the ceilometer beam was filled with a swirling mass of birds as high as they could see," and was shut off at that time.

Although over 2000 birds were estimated (probably very conservatively) as being killed, only 120 were collected for identification by Air Force personnel.

Columbia

On the morning of September 7, 726 birds were collected; 428 were picked up the following morning, and 233 (of which at least 60 were fresh kills) were added the morning of September 9. Mrs. Smith estimated that less than 75 percent of those killed were recovered.

All birds were collected on September 8, but most of the kill is believed to have occurred the night of September 6-7. The numbers of Red-eyed Vireos, Ovenbirds, and American Redstarts were estimates.

A summary of the data is given in Table I. For each station, collections of September 7, 8, and 9 are pooled, the total numbers of each species collected are given, and the proportions of the local samples (as percentages) composed of the various species are calculated.

A total of 4189 specimens representing 61 species were collected and examined. The richest collection came from Smith Reynolds airport ceilometer at Winston Salem—889 individuals of 45 species.

Discussion

Weather

In order for a kill of this magnitude to occur, two factors must be operative: (1) large numbers of nocturnal migrants must be moving, and (2) atmospheric conditions must favor their flying into obstructions. Although it is impossible at this point to defend a causal theory for either of the factors, it is easy to speculate upon the matter. Surely, the sudden 10-20 degree drop in temperature coupled with a favorable (light to moderate northerly) wind could well have provided the migration impetus necessary. As this great mass of cold air (the first of the season) swept southward, it is not difficult to imagine the migrants from as far north as the interior of Alaska might have been caught up in it (note the Horned Grebe in Charleston's collection) and carried along. At the same time, any birds moving in the previous weaker cold front might have slowed their southward movement as that air mass became stationary. On the night of September 6-7, as the second, well developed frontal system overtook and passed through the former system, migrants from both may have joined in the southward flight.

Nocturnal migrants may rely on celestial observations to orient themselves. In the absence of these, they sometimes become confused and are attracted to lights and lighted objects. Ceilometers furnish a narrow vertical beam of intense light; television towers have obstruction lights which can be seen for miles. Observers at both Winston-Salem and Goldsboro noticed large numbers of birds milling about within the ceilometer beam, evidently completely confused and disoriented. Stoddard (1962) observed birds milling about in the vicinity of obstruction lights on a tower in Leon County, Florida. Although much work remains to be done by many observers before all factors affecting kills such as these may be known, the partial explanation offered above certainly seems plausible for this occasion.

Species Composition

As might be expected most of the species represented are fairly common early fall migrants which breed in forested regions east of the great plains and north of North Carolina. A few notable exceptions are worth a comment:

Horned Grebe—This species is rare in television tower and ceilometer collections. Stoddard (1962) found none in his collection of more than 15,000 tower mortalities; Johnston and Haines (1957) had none in their sample of at least 9,000 ceilometer, tower, and high-building mortalities. In addition, September 7 seems to be an unusually early record for this species. Both Pearson, Brimley, and Brimley (1959) and Sprunt and Chamberlain (1949) list earliest arrival dates in October.

Traill's Flycatcher, Golden-winged Warbler, Blue-winged Warbler, Tennessee Warbler, Nashville Warbler, Cerulean Warbler—these are species which normally migrate in the autumn through the Mississippi Valley. In such a large sample as this we might expect a few individuals of each to show up. As a group, they compose only 0.59 percent of the total collection.

Wilson's Warbler—The collection of eight, taken at Winston-Salem, tends to corroborate the belief of Sprunt and Chamblerlain (1949) that this rare species is more frequently encountered in the Piedmont than in the Coastal Plain during migration.

Mourning Warbler—Apparently, specimens of this species are unknown outside the mountains in either North or South Carolina (Pearson, Brimley, and Brimley, Revised Edition, 1959; Sprunt and Chamberlian, 1949). It is perhaps significant that the two specimens in this kill came from the station closest to the mountain region, Winston-Salem.

Swainson's Warbler—The presence of two of these rare summer residents (Sprunt and Chamberlain, 1949) in Charleston's collection seems remarkable.

Although the above observations are interesting, their significance is difficult to evaluate because of the small numbers of individuals involved. In several instances, because of the large total sample and distribution of the sub-samples, it is possible to infer something of the distribution of particular species and groups of species.

Flycatchers, Yellow-breasted Chat, Canada Warbler, Baltimore Oriole—These species are relatively more common in collections from the interior, indicating that they may utilize a Piedmont rather than a Coastal Plain route.

Black-and-white Warbler, Ovenbird, Kentucky Warbler, Yellowthroat—Uniform distribution of these species may indicate that they migrate in a wide band from the coast to at least the foot of the mountains.

Red-eyed Vireo, Prothonotary Warbler, American Redstart—This group seems to use a Coastal Plain route. In the case of the Prothonotary Warbler, which breeds primarily in the Coastal Plain, such a choice seems logical; preference in the other more widespread species is more difficult to explain.

Table 1

SUMMARY OF BIRD MORTALITY, SEPT. 6-8, 1962

	WINSTON-SALEM				RALEIGH		GOLDSBORO		COLUMBIA		CHARLESTON		TOTAL	
	TV Tower		Ceilometer		TV Tower		Ceilometer		TV Tower		TV Tower			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Horned Grebe											1	0.06	1	0.02
Sora	1	1.16	1	0.11							3	0.19	5	0.12
Belted Kingfisher									1	0.07			1	0.02
Eastern Kingbird									1	0.07	2	0.12	3	0.07
Great Crested Flycatcher .			1	0.11									1	0.12
Yellow-bellied Flycatcher .	3	3.49	8	0.89									* 13	0.31
Traill's Flycatcher	1?	1.16	4	0.45					4	0.29			** 6	0.14
Least Flycatcher	2	2.32	3	0.34									** 6	0.14
Eastern Wood Pewee	2	2.32	9	1.00			1	0.83					12	0.29
Long-billed Marsh Wren ..					1	0.97							1	0.02
Catbird									1	0.07			1	0.02
Wood Thrush									1	0.07			1	0.02
Swainson's Thrush	2	2.32	3	0.34									5	0.12
Gray-cheeked Thrush											3	0.19	3	0.07
Veery			6	0.67	2	1.94	1	0.83	197	14.20			206	4.92
White-eyed Vireo					3	2.91	2	1.67	16	1.15			21	0.50
Yellow-throated Vireo ...			3	0.34					1	0.07			4	0.10
Red-eyed Vireo	13	15.12	78	8.71	38	36.89	8	6.67	562	40.52	560	34.96	1259	30.05
Black-and-White Warbler .	6	6.98	44	4.92	6	5.82	25	20.83	45	3.24	40	2.50	166	3.96
Prothonotary Warbler			3	0.34	3	2.91	2	1.67	31	2.24	18	1.12	57	1.36
Swainson's Warbler											2	0.12	2	0.05
Worm-eating Warbler	2	2.32	3	0.34			1	0.83	13	0.94	19	1.19	38	0.91
Golden-winged Warbler ..	1	1.16	3	0.34					4	0.29			8	0.19
Blue-winged Warbler									2	0.14			2	0.05
Tennessee Warbler	1	1.16											1	0.02
Nashville Warbler			1	0.11									1	0.02
Parula Warbler			3	0.34					9	0.65	4	0.25	16	0.38
Yellow Warbler			2	0.22					5	0.36	1	0.06	8	0.19
Magnolia Warbler	3	3.49	49	5.47					5	0.36			57	1.36
Cape May Warbler			1	0.11					2	0.14			3	0.07
Black-throated Blue Warbler	1	1.16	6	0.67	1	0.97			2	0.14	12	0.75	22	0.52
Myrtle Warbler									2	0.14			2	0.05
Black-throated Green Warbler			2	0.22									2	0.05
Cerulean Warbler			2	0.22					4	0.29	1	0.06	7	0.17
Blackburnian Warbler	1	1.16	18	2.01	1	0.97			3	0.22			23	0.55
Yellow-throated Warbler ..							1	0.83					1	0.02
Chestnut-sided Warbler ..	7	8.14	41	4.58					8	0.58			56	1.34
Bay-breasted Warbler									4	0.29			4	0.10
Prairie Warbler			1	0.11			1	0.83	12	0.86	2	0.12	16	0.38
Palm Warbler			1	0.11									1	0.02
Ovenbird	8	9.30	136	15.19	32	31.07	31	25.83	117	8.43	560	34.96	884	21.10
Northern Waterthrush ..	2	2.32	24	2.68			7	5.83	60	4.32	10	0.62	103	2.46
Louisiana Waterthrush ...											1	0.06	1	0.02
Kentucky Warbler	1	1.16	19	2.12	4	3.88	2	1.67	51	3.68	11	0.69	88	2.10
Mourning Warbler			2	0.22									2	0.05
Yellowthroat	4	4.65	24	2.68	3	2.91	11	9.17	47	3.39	7	0.44	96	2.30
Yellow-breasted Chat ...	5	5.81	90	10.05	2	1.94			13	0.94			110	2.62
Hooded Warbler			5	0.56			2	1.67	43	3.10	2	0.12	52	1.24
Wilson's Warbler	1	1.16	7	0.78									8	0.19
Canada Warbler	9	10.46	158	17.76					9	0.65	1	0.06	177	4.22
American Redstart	4	4.65	65	7.26	6	5.82	22	18.33	50	3.60	340	21.22	487	11.62
Bobolink	1	1.16	10	1.12			1	0.83	49	3.53	2	0.12	63	1.50
Orchard Oriole			3	0.34					2	0.14			5	0.12
Baltimore Oriole	5	5.81	36	4.02	1	0.97	2	1.67	7	0.50	1	0.06	52	1.24
Scarlet Tanager			3	0.34					1	0.07			4	0.10
Summer Tanager			2	0.22					1	0.07	1	0.06	4	0.10
Rose-breasted Grosbeak ..			1	0.11									1	0.02
Blue Grosbeak			5	0.56					1	0.07			6	0.14
Indigo Bunting			1	0.11									1	0.02
Dickcissel			2	0.22									2	0.05
Bachman's Sparrow									1	0.07			1	0.02
TOTALS	86	99.94	889	99.41	103	99.97	120	99.99	1387	99.95	1604	100.10	4189	100.04
NO. OF SPECIES	25		45		14		17		40+		25		61	

* Includes 2 *Empidonax* from Columbia

** Includes 1 *Empidonax* from Columbia

Veery—Here is a real enigma. Why should veeries comprise 14 percent of the total collected at Columbia and less than two percent at any other station?

Conclusions

1. The widespread bird mortality experienced periodically at airport ceilometers and television towers furnishes ornithologists with large unbiased samples of migrants unobtainable by any other means.

2. Cooperative studies such as this one, which can yield much valuable information concerning the distribution of migrant species in time and space, should be encouraged among bird club members.

3. The collection consisted mostly of common early fall migrants which breed east of the great plains and north of North Carolina. Red-eyed Vireos, Ovenbirds, and American Redstarts composed almost two-thirds of the collection. Species which typically migrate down the Mississippi Valley contributed less than one percent of the total.

4. Small numbers of rare species were found and are to be expected in such large samples.

5. It was possible to classify at least some of the species into three groups: those which were more abundant in the Piedmont (flycatchers, Yellow-breasted Chat, Canada Warbler, Baltimore Oriole), those which were rather uniformly distributed over the area sampled (Black-and-white Warbler, Ovenbird, Kentucky Warbler, Yellowthroat), and those which showed a preference for the Coastal Plain (Red-eyed Vireo, Prothonotary Warbler, American Redstart).

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N. C. State Museum,
Raleigh, North Carolina,
November 12, 1962

MALLARDS NESTING IN WAKE COUNTY, NORTH CAROLINA

By James F. Parnell and T. L. Quay

On May 9, 1962, a hen Mallard (*Anas platyrhynchos*) was seen to alight in a small marsh near the southeastern edge of Lake Raleigh, a city reservoir of eighty-one acres lying immediately south of the Raleigh, North Carolina city limits. As this was late for a migrant, a closer check was initiated. The hen was subsequently seen on this marsh several times in May, but no indication of nesting was found until June 9. On this date a hen Mallard and three, approximately one-half-grown ducklings were flushed from a willow-lined slough near the head of Lake Raleigh. This was about one-fourth mile from the marsh where the hen had been observed earlier.

On the next day, June 10, a second Mallard hen was observed with a brood of five, three-quarter-grown ducklings in a wooded marsh on Swift Creek near the upper end of Lake Benson, also a city reservoir. Lake Benson contains about 400 acres of water and is located ten miles southeast of Lake Raleigh.

Both broods were discovered shortly after dawn, feeding in shallow sloughs which were lined with dense vegetation. The broods moved into this heavy cover upon discovery, and although later checks were made at both locations, neither brood was seen again.

It is of particular interest that, of two earlier inland records of Mallards breeding in North Carolina, one was also from Lake Raleigh, where on May 8, 1943, a hen and nest with 11 eggs were found (Simpson, 1943). The only other inland nesting record for this species is from Greensboro, North Carolina, on May 7, 1940; there are, however, several known records from the coastal counties (Pearson *et al.*, 1959).

A survey of several of the general source-books indicates that the nesting range of the Mallard extends southward in the Atlantic coast states to northern Virginia. More detailed reports from Virginia and Maryland raise serious doubts about whether most of the Mallards nesting in these states are truly wild birds. They indicate rather that many of the reported cases of nesting Mallards are not of feral birds, that is, birds released by gun clubs or which have escaped from domestic flocks (Stewart and Robbins, 1958; Murray, 1952).

There is a recent report of a Blue-winged Teal nest in Watauga County, North Carolina (Smith, 1960), and of a Gadwall nest at Bull's Island, South Carolina (Chamberlain, 1960). There is a well-established colony of Gadwalls at Pea Island, North Carolina along with native Black Ducks and Blue-winged Teal, that has developed during the past 25 years (Parnel and Quay, 1962). These Pea Island ducks are wild birds, and the Gadwall population in particular indicates that this species is in the process of extending its southern nesting limits. The possibility of range extension also exists for the Mallard, and the reported observations may represent fragmentary evidence of a sparse, regularly breeding population extending into eastern North Carolina. However, an intensive program of field research is needed throughout the southeastern states before a final determination of the true status and abundance of nesting Mallards can be made.

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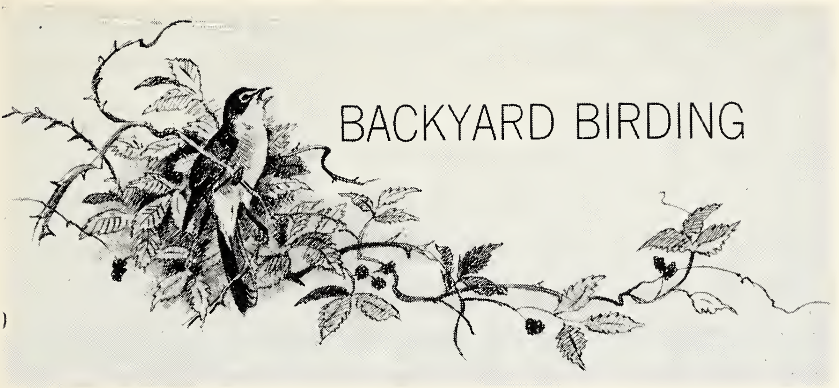
Zoology Department
N. C. State College
Raleigh, North Carolina
November 12, 1962.

IN MEMORIUM

On November 5, 1962, Carolina Bird Club lost an accomplished member in the death by a heart attack of Robert H. Coleman, at his home in Charleston, South Carolina. He had retired in 1959 after a distinguished career as a teacher of mathematics at the College of Charleston, but his love for the outdoors had led him into the fields of mammalogy and ornithology many years ago and he continued to pursue those studies with vigor. In the former, he attained national recognition. His private collection of mammal skins numbered near 2000. He had long been a member of the Board of Trustees of the Charleston Museum and was Chairman of that body when he died. He was a Past President of the South Carolina Academy of Science. He was one of the two South Carolina signers of the Certificate of Incorporation of the Carolina Bird Club, Inc., in 1949. For the past several years he ably edited the monthly bulletin of The Charleston Natural History Society. Bob Coleman's passing is a severe loss to us and we extend our sympathy to Wilhelmina and their children.—B. RHETT CHAMBERLAIN, *Wadmalaw Island, S. C., November 8, 1962.*



BACKYARD BIRDING

"This year, I have been interested in observing the difference in temperament of birds," writes Mrs. W. C. Davison, of "Robinhurst," Roaring Gap, North Carolina. She continues:

"In March, three Pine Siskins visited my feeder regularly. They were bad tempered little creatures. I saw them threaten a pair of Bluebirds, also white-throats, Cardinals, and even Evening Grosbeaks. If I opened the window to put out more food, they would perch on the electric wires only a yard from the windows, much nearer than any other birds, and scold at me until I left and they could return. They ate stale doughnuts and baby chick scratch food. One of them actually succeeded in cracking sunflower seeds and eating the kernels. The other two did not even attempt it.

Hummingbirds are notoriously aggressive. I have seen them dart at Cardinals and Phoebes. One day, one chased a Blue Jay across our little valley, flying about eight feet behind the big bird. When the Blue Jay veered off his straight line of flight, the hummingbird veered too, following right after him. Ten minutes later, that or another jay flew back across the valley, with the hummer still following at the same distance.

Early in April, I saw two male towhees fighting each other so furiously, about fifteen feet up in the air, that they tumbled to the earth and continued to fight on the ground. A Blue Jay, which had been watching them from a nearby pine, dived down on them and joined in the fight, driving off one of the towhees, which he pursued closely. The other towhee remained on the ground at the scene of battle for several minutes, then flew off in a different direction. The towhees were rivals, I suppose.

A Catbird regularly drove away a chipmunk that came to our feeder for sunflower seed and peanuts, although the catbird itself did not use the feeder. He would also dive at the chipmunk when it ventured out on the lawn and drive it back into its burrow. If we sat out on our little terrace nearby, about twenty feet away from the catbird's nest, this same bird would "dive-bomb" within a couple of feet of our heads. None of the other catbirds showed this fighting spirit.

In Durham this past spring, there were a few more Bluebirds about than the previous year. On February 24, a pair appeared on the second story window feeder of our house, and while the female ate their preferred food—a mixture of suet, peanut butter, and baby chick scratch feed—the male kept jumping up, with his wings outspread, and pecking at his reflection in the window glass. He would keep this up as long as his mate stayed on the feeder, not stopping to eat with her. Finally, by March 3, he no longer flew at or pecked the glass, but still crowded so close to it that he pressed his breast against it and seemed to be peering into my room. I have several times seen male Cardinals fight their image in a window, but had never before seen a Bluebird behave this way. Later in the spring, they were busy around one of the bluebird houses, and, on April 28, they were carrying food in to nestlings.

We spent most of May at Roaring Gap, and were there, also, from late June through the first week in October. May 13 was the high spot for migrants. There had been rain and fog for four days previously, but that morning, it was only rather misty. I listed eight Yellowthroats on our thirteen acres, three Canada Warblers, one Cape May Warbler, one female Redstart, two Northern Waterthrushes, one Spotted Sandpiper, two Solitary Sandpipers, a Green Heron, a Black-billed Cuckoo, a Wood Thrush, a Veery, two Yellow Warblers, and a Blackpoll Warbler, besides the Redwings (already nesting), the many Catbirds, Robins, and thrashers.

May 14 was also foggy early in the morning. About 7 AM, I was startled to see a huge bird that looked like an Osprey flying through the mist over one of our ponds. Later, the fog lifted, and twice more the big hawk, obviously an Osprey, appeared. I had always associated this bird with salt marshes and tide water rivers, but Mr. Lin Hendron tells me that they frequent a small lake at Devotion, at the foot of the Blue Ridge, just below Roaring Gap, and that he has also seen them along the Yadkin River, near Elkin.

In August, we saw the start of fall migration. On the 9th, a flock of about twenty-five Barn Swallows gathered on the telephone wires, with another group of five, evidently young ones, on a nearby wire fence. Some of the adults were catching insects on the wing and—hovering—putting them in the open beaks of the young perched on the fence.

On August 17, the first nighthawks appeared at dusk, seven of them. Then four on the 19th, 23 on both August 31 and September 1, 50 on the 2nd, 150 on the 3rd, 21 on the 5th, and then no more.

On September 11, six Blue-winged Teal spent the day on one of our ponds, mostly sleeping, but occasionally feeding a bit in the shallow water. On the 13th, a Pied-billed Grebe was on the other pond all afternoon but was gone the next morning. In previous years, we have had one that stayed with us well into November.

A Gray-cheeked Thrush appeared on September 17, with the first two Swainson's Thrushes we had seen, and from then on, we could always find several of the latter in the Black Gum trees, the fruit of which they relish. September 23 was the best day for migrants: 17 Swainson's Thrushes, a male Redstart, a Scarlet Tanager (greenish-yellow and black), a young Rose-breasted Grosbeak (with the crimson showing beautifully on his breast, but still with the striped head), a Black-throated Blue Warbler, a Magnolia Warbler, a Yellowthroat, and the best view of an Ovenbird I have ever had."

B. Rhett Chamberlain of Wadmalaw Island, S. C. writes:

"Late this afternoon I watched an Osprey fishing over the salt creeks to the east of our porch. In less than fifteen minutes it caught and ate three small fish, 6 to 8 inches long, in just five dives. At each catch the bird flew directly to the top of a tall dead pine across our creek, three hundred measured yeards away, and tore the fish into bits and ate it. Watching with a 30X scope I easily followed its table manners. The first fish was held with the right foot and pinned against the limb on which the bird perched. The left foot was firmly anchored to the limb. Beginning at the head, and with much neck twisting by the Osprey, the fish was cut and torn apart and swallowed piece by piece. The second fish was dispatched in the same manner. For the third fish, the ambidextrous bird *changed feet*, holding its prey with the left foot. This third serving was repeatedly interrupted by feather ruffling and wing drooping. The five dives I had witnessed had pretty well soaked the Osprey and night was not far off."

From Mrs. Margaret W. Barnes, Box 4, Warrenton, North Carolina comes the best hummingbird-feeding idea that I have heard of in a long time. I shall certainly try this next spring. She writes:

"In 1959, I began attracting and feeding hummingbirds. I saw only four that year, all females. In 1960, there were five females and one male until later, when there were as many as nine at the feeders at one time. In 1961, five came in April, stayed about two weeks, then left. There were no more until May 23, when there were ten to twelve around the feeders. There were three males in this group.

This year, one female came on April 23, and a male three days later. There were no more until June 5. After then, there were as many as fifteen at the feeders at one time.

My feeders are small eye-drop bottles with the dropper part cut off. I paint the top third of the bottles with red nail polish and tie them, with "twistems" to the small bare branches of a large branch of privet, wedged securely in a pipe driven in the ground outside my window. I unhook my screen, pull the branch inside, fill the bottles and push it back outside. The birds will drink from the bottles nearest the outside while I am filling the others, and will drink from a bottle held outside in my hand.

They begin feeding at dawn and drink until dark. Usually one bird comes, takes a few sips and zooms off. In a few seconds they all come in. I fill the eleven bottles every night and by seven o'clock they are empty. From June 6 until September 1, I used forty-six and a half cups of sugar made into syrup—two cups of water to each cup of sugar. Feeding hummingbirds from the window, as I do, is a wonderful hobby for anyone who cannot get outside to feed the birds."

Dear Mrs. Faver:

I have noticed your request for information about the Brown-headed Cowbird in the September issue of **The Chat.**

On August 23, 1961, I captured a young Cowbird in the trap which I operate for English Sparrows in the back yard. That surprised me, for I had seen no adult Cowbirds about during the spring and summer.

This past spring a number of adult Cowbirds appeared in the backyard. At times there may have been as many as a dozen about the bird feeders and feed scattered on the ground. We saw several of them right on through the spring and early summer. A few were still present around the middle of July; then they seemed to disappear. Several males were seen going through their courtship antics earlier in the spring. I presume that some of the females laid eggs, although I did not observe any juvenile birds until just the other day when one appeared at a feeder.

On April 28, I saw a flock of about thirty Cowbirds feeding in a pasture along the River Falls Road a short distance off Highway 276.

We have been feeding the birds here in our backyard for the past five or six years, but this past summer is the first time that I have ever seen Cowbirds anywhere nearby.

Sincerely,
William C. Grimm
Greenville, South Carolina

Dear Mrs. Faver:

Should I have chosen to write a story instead of a letter to you, I would have entitled it: *Birds Go Modern.*

During the summer we observed a pair of Indigo Buntings raise a family of four in a low Cape Jessamine bush just outside a window where my husband and I had a ringside seat. Just recently, I took the nest out of the bush and found that the entire bottom of it was built with strips of plastic or celophane paper, some blue and some clear. Since there was a difference in the kinds used, it appears to me that the birds had searched for this material, or at least realized its value when they came upon it.

We built our present home about eight years ago when there were no trees or bushes close around. It has been quite interesting to watch the increase in number and variety of birds as our place has become more habitable for them.

Sincerely yours,
Carmen P. Bell, (Mrs. John C.)
Inman, South Carolina

A. R. Faver, *Dept. Editor, Eastover, S. C.*

WILSON ORNITHOLOGICAL SOCIETY MEETING

The 1963 annual meeting of the
Wilson Ornithological Society will be held at
Charleston, South Carolina
May 2-5, 1963

NEWS AND COMMENTS

CBC Fall Meeting.—Hurricane Daisy responded to the wishes of all 102 members and guests of the Carolina Bird Club on the weekend of October 5-7, 1962, and stayed out at sea, assuring splendid "Indian summer" weather for the fall field trip at Myrtle Beach, S. C. Saturday's trips afield in the surrounding area, encompassing many habitats were lead by Miss Lelia Johnson of Murrell's Inlet and Mr. R. G. MacFarlan of Brookgreen. In the afternoon a boat trip through the Inlet at Murrells and out into the ocean was thoroughly enjoyed by almost every member present.

Highlights noted Saturday were: a flock of from 300-400 Black Skimmers, alternately wheeling about over the Inlet at Murrell's and settling on a narrow sand spit with utmost precision; Peregrine Falcons near the beach north of Myrtle; five Ospreys bathing in the shallows; and finding Chipping and Field sparrows, Yellowthroats, Palm, Prairie and Pine warblers, Redstarts, Yellow-throated vireos, etc.

No Cattle Egrets were seen during the meeting but on October 4, Mrs. Annie Faver's sister, Mrs. Elizabeth Armour, reported several while driving down highway #17 near Surfside.

Saturday evening's meeting was held at the handsome new S. C. Public Service Authority Auditorium in Myrtle Beach. President Harry Davis spoke briefly, welcoming members and their guests, and announcing that the mid-winter field trip would be at Lake Mattamuskeet in North Carolina.

An excellent film on the Bald Eagle was shown, giving some shots of the late Charles Broley, a Canadian banker, who spent his retirement banding eagles.

Mr. Stephen Chapman proved a most successful chairman of the field trips. 114 species of birds were observed during the meeting.

Bird watchers from all over the east attended the meeting. Although most people were from the Carolinas, others came from New York, Tennessee, Virginia, and Georgia.—Kay C. Sisson, *Secty. CBC.*

Christmas Bird Count.—The official dates this year for the Christmas Count are from December 19 until January 1. As in previous years, compilers of counts in the Carolinas are urged to send a complete copy of their count to the Editor of *The Chat* by January 15, 1963. Compilers should strive toward completeness of these counts, including, among other things, party-miles, party-hours, and other details required for the *Audubon Field Notes* accounts. Double-spaced, typewritten, complete accounts are required, and please remember to include some supporting initials for unusual observations.

Jack Dermid.—After being employed by the Wildlife Resources Commission of North Carolina for 12 years, Jack Dermid has resigned to accept a teaching position in biology at Wilmington College. Members of CBC know and appreciate Jack especially for his excellent photographs, many of which have adorned the covers of *The Chat.*

Dr. David A. Adams.—Dave Adams has recently taken a position as Curator at the N. C. State Museum in Raleigh, and we wish him well in this new endeavor. In the past he has made many valuable contributions to the ornithology of North Carolina, and in the present issue has compiled a useful article on bird mortality.

CBC Mid-winter Field Trip.—According to CBC President Harry Davis, the mid-winter field trip will be held again at Lake Mattamuskeet, January 11-13, 1963. Further details of the field trip will appear in a newsletter, but in the meanwhile individuals should be making plans to attend this rewarding excursion.

Golden Eagle Bill.—All of us are heartened to learn that the Congress has now passed a bill to protect the Golden Eagle as well as the Bald Eagle. We should all continue our efforts to discourage hunters and farmers from killing any eagles, hawks, or owls.

Correction.—In Paul Sykes' article, "A Look Back into History . . ." (*Chat*, 26:31. 1962) beneath figure 1, the date should read December 9, 1912 instead of December 9, 1962.

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Frigate-bird Off Gull Island, Dare County, North Carolina.—On June 15, 1962, I observed a female Magnificent Frigate-bird *(Fregata magnificens)* over Pamlico Sound, north of Cape Hatteras, North Carolina. The bird was seen at 3:15 PM *EST*, flying northward between Gull Island and the Hatteras Bank, and observed for about 10 minutes until it disappeared to the north. It flew very high, apparently sailing on currents aloft since it did not beat its wings during the time my wife and I observed it. No storm or strong winds from the south had occurred just prior to this date, and the reason for its northward drift must remain speculative. We noted all relevant field marks specifically, in good light. with 8x binoculars and a 20x telescope. I am very familiar with the species, having seen it many times in tropical waters while serving in U. S. Navy.

The A.O.U. *Check-list of North American Birds* (1957) states that the Magnificent Frigate-bird ranges, in the western Atlantic, casually to North Carolina and accidentally farther north. A recent observation over Wilmington is recorded in *The Chat* (24:104, 1960).— JACK P. HAILMAN, *Department of Zoology, Duke University, Durham, North Carolina, August 21, 1962.*

A White Ibis in the Mountains of South Carolina.—On September 1, 1962, my family and I were camping at Table Rock State Park in Pickens County, in the extreme north-western part of South Carolina. As we were eating lunch near a small stream that borders the campground, an immature White Ibis *(Eudocimus alubus)* slowly walked down the stream. Apparently the bird was feeding on crayfish which abound in the stream. It was rather startling to see this bird so far from its usual habitat where I have watched many of them (the Carolina coast and the Florida Gulf coast). My companion John F. Twombly and I jumped up from the table and followed the bird down stream. It seemed very much at home and kept only 20 to 30 feet in front of us. I rechecked the field marks of the White Ibis in "Peterson," which I had in my hand, and all were there. It was 15-18 inches high, grey-brown in color but lighter in the underparts. The bill was long and decurved, dark at the tip, the rest being a definite reddish color. The legs were fleshy pink. At one time the bird ruffled its wings and the white rump was clearly visible. At no time did it attempt by fly and finally it disappeared in the underbrush where we could no longer follow it.

Later that day I discussed the observation with the Park Ranger. He stated that the bird had been seen in the Park during the past several months. He had seen the bird fly and had noticed it roosting in trees near the stream. We saw the bird again on September 3.

I am reporting this observation since *South Carolina Bird Life* (Sprunt and Chamberlain, 1949) shows Aiken County as the western limit for this species.—T. M. RIAL, *791 Boardman Road, Aiken, South Carolina, September 9, 1962.*

A Roseate Spoonbill Sighted on the North Carolina Coast.—A few days ago, about August 16, I saw a Roseate Spoonbill *(Ajaia agaia)* between Wrightsville and Carolina Beach, North Carolina, feeding along the edge of the inland waterway. The spot where it was sighted is about 15 miles from the mouth of the Cape Fear River. I saw a single bird feeding on the shore line, much like a Common Egret, and I circled with my boat to get a better view. His beautiful pink body and shovel-shaped bill were unmistakable when I cruised within fifty yards of him.

Birds of North Carolina (1959) gives no record of the Roseate Spoonbill in the state since 1919 and I know of none since that time.—LAURENCE G. SPRUNT, *P. O. Box 3625, Wilmington, North Carolina, August 29 and September 5, 1962.* (It is interesting to note that the 1919 record referred to was made at the mouth of the Cape Fear River. We know of no other recent record for either of the Carolinas but a single bird was reported at Brunswick, Georgia during the summer of 1961, and one was reported at St. Marys, Georgia during the present summer, 1962,—*Dept. Ed.)*

Sight Records of Swallow-tailed Kites on Hatteras Island, North Carolina.—Observations of Swallow-tailed Kites *(Elanoides forficatus)* would be of interest even if the species were not so rare in North Carolina. In the summer of 1962 from May 26 to July 23, Swallow-tailed Kites were observed in the Buxton Woods area near Frisco on Hatteras Island. The sight records described below have been reported by several observers.

On May 26, Aycock Brown, Manager of the Dare County Tourist Bureau, reported seeing eleven "large black and white birds with long forked tails." Recognizing that these birds were strange to the area, he paid careful attention to their characteristics and recorded the observation in his notebook.

On May 30, Mr. Brown returned to the same place near Frisco and this time he saw five Swallow-tailed Kites. On another trip to this spot on June 5 he failed to observe the kites. He stated that the Swallow-tailed Kites were observed over the northeast corner of the Billy Mitchell Airport and island roads sailing around and alighting in trees on top of sand dunes.

On June 21, while driving along the highway through Frisco, Thomas L. Quay and Park Naturalists Vernon C. Gilbert and Clay L. Gifford observed one Swallow-tailed Kite in flight. This beautiful and conspicuous bird was watched for several minutes through 7 x 50 binoculars by all three observers. It circled and glided gracefully over the tall pines in front of us and then disappeared from our view. This was around 11 AM on a clear warm day.

Hatteras Island District Ranger Jack E. Stark reported that on June 27, 1962, about 11 AM while on an inspection tour of Hatteras Island with Secretary of the Interior Udall, they sighted three Swallow-tailed Kites circling over the area known as "Open Ponds" in the Buxton Woods. Mr. Stark also stated that he had seen Swallow-tailed Kites in May and June in the vicinity of Frisco, but that he did not record the exact dates.

Another report was received from Seasonal Historian William A. Harris who described seeing three Swallow-tailed Kites soaring with one Osprey over the sand flats near Frisco (this is adjacent to the Buxton Woods) at approximately 11 AM on July 19, 1962. These were also observed by Mrs. Harris and Mrs. D. E. Williams.

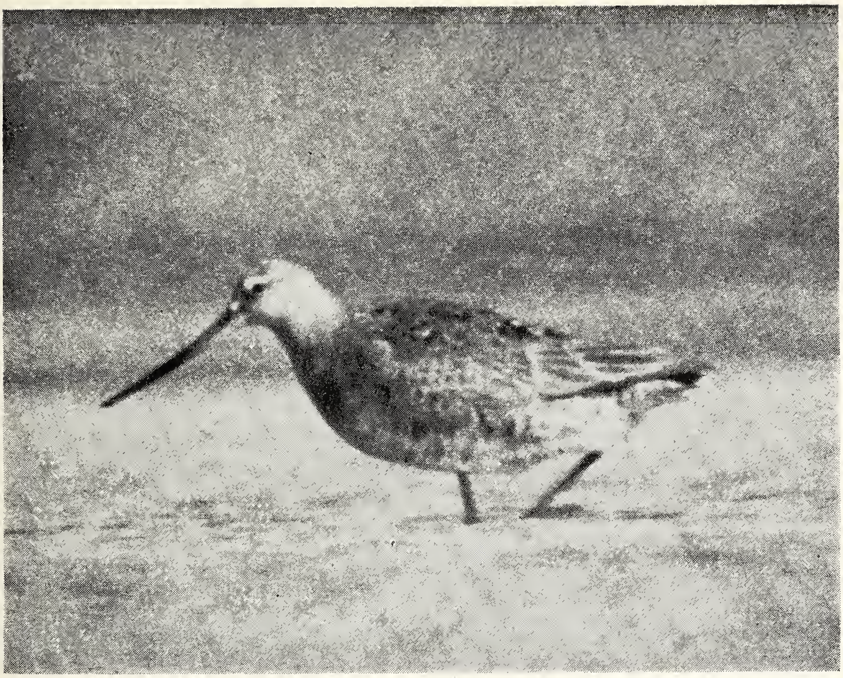
The latest observation this summer was on July 23 when Park Naturalists Gilbert and Gifford saw one kite flying over the highway just south of Frisco just before noon on a clear, hot day. The Swallow-tailed Kite is usually a strikingly beautiful bird, but this one presented a somewhat ragged appearance, apparently having some of its primary feathers missing.

It is possible that these Swallow-tailed Kites nested in the Buxton Woods, judging from the length of time that they remained in the area, but no evidence of nesting was obtained. The Buxton Woods is similar in general aspect to their nesting habitat in the pineland of South Florida, where they build their nests in tall pines. On Hatteras Island, Buxton Woods extends for seven miles and varies from one to three miles in width. Physiographically the region is a series of wooded dunes with fresh-water ponds and marshes in the swales between the ridges. The woods are dominated by loblolly pine (*Pinus taeda*), with oaks, holly, ironwood, red bay, red cedar, and other species beneath the pines. The palmetto *(Sabal minor)* is abundant in the understory. Spanish moss *(Tillandsia usneoides)*, which is used as a lining in Swallow-tailed Kites' nests in localities where it is available, occurs sparsely in a few spots. Snakes, lizards, frogs, and insects, which the Swallow-tailed Kites feed upon, are abundant in the area.—VERNON C. GILBERT and THOMAS L. QUAY, *Cape Hatteras National Seashore, Manteo, North Carolina*, and *Zoology Department, N. C. State College, Raleigh, North Carolina, November 1, 1962.*

Purple Gallinule Sighted at Raleigh, North Carolina.—On May 21, 1962, I flushed a Purple Gallinule *(Porphyrula martinica)* from the marshy edge of Lake Raleigh, an eighty-one acre lake just south of the Raleigh city limits. I was able to approach to within fifty yards of the bird and observed that it was an adult in full breeding plumage. The white shield at the base of the bill and the yellow legs eliminated any possibility of this being a Common Gallinule. The gallinule was observed for several minutes, during which time it was harassed continuously by several resident male Redwings. Finally, it dropped from its perch in the top of a low willow into the dense marsh and was lost from view. The bird was apparently a wandering migrant, as the closest breeding records are from Lake Ellis in Craven County (*Chat*, **15**:79, 1951). There are several coastal observations of this species, but the only prior record from Wake County was by H. H. Brimley in 1887 *(Birds of North Carolina, 1959)*. JAMES F. PARNELL. *Zoology Department, North Carolina State College, Raleigh, North Carolina, September 5, 1962.*

A Hudsonian Godwit on the North Carolina Coast.—En route to Ocracoke on August 3, 1962, my husband and I stopped at the Bodie Island Lighthouse (just above Cape Hatteras, North Carolina) and saw in the fresh water lake there, much to our surprise and delight, a Hudsonian Godwit *(Limosa haemastica)*. Although the bird was rather far from us and could not be approached, the viewing conditions were execllent and our Questar revealed the white tip on the tail in addition to the white rump which was visible with binoculars and Balscope. After checking the Accidentals in our "Peterson" and reading the comments in *A Gathering of Shore Birds* (1960) by H. M. Hall, we felt there could be no doubt about our identification of the Hudsonian Godwit.

On our return trip on August 8, the godwit was still feeding in approximately the same territory as on the previous sighting. When we reached home we read in *The Chat* (**26**:41, 1962) and in *Birds of North Carolina* (1959) about the rarity of the Hudsonian Godwit on Carolina shores; therefore my husband returned to Bodie Island on August 10 to photograph it. On the morning of August 11 he found it still feeding in the same area of the lake. The bird was extremely shy and had to be photographed at a great distance. Satisfactory pictures were obtained using a 1500 mm. lens with enlargements. One or two of the color slides show all of the necessary field marks and prove the plumage well along in the change from summer to winter. Although the bird was flushed several times during and after the photography, it never did leave the lake and was reluctant to leave its customary territory. When flushed it revealed dark wing linings.—MRS. J. M. POTTER, JR., *P. O. Box 487, Zebulon, North Carolina, August 27, 1962.*—(A note from Paul W. Sykes, Jr. of Norfolk, Virginia, informs us that he and H. A. Hespenheide carefully observed and identified a Hudsonian Godwit on the lake at Bodie Island Lighthouse on August 5, 1962. This presumably was the bird reported by Mrs. Potter. These observations greatly strengthen the South Carolina record reported in the June, 1962, *Chat* and referred to by Mrs. Potter.—*Dept. Ed.*)



Ruffs in the Beaufort, North Carolina Area. — On the afternoon of July 29, 1962, at low tide, Dan Knight, Robert Thomas, John Fussell, and I went to the North River marsh in Carteret County, North Carolina. The marsh was teeming with birds and we worked it throughly, much of the time in mud to our knees. Most of our regular shore birds were present in good numbers along with gulls, terns, egrets, and herons. While we were watching several Greater and Lesser yellowlegs feeding in a shallow pool, we saw a bird feeding with them that was noticeably different. Its bill was slightly heavier than that of the Lessser Yellowlegs and did not seem to be quite as long. Its legs were not bright yellow but rather a clay or ochre color, and it was a little larger than the Lesser but not as large as the Greater Yellowlegs. The back had decidedly more brown in it than that of the Yellowlegs and there were brownish markings on the breast with white underparts. We were within 175 feet of it, had both Greater and Lesser yellowlegs in our glasses at the same time, and could make comparisons. We also had with us both the Peterson and Pough Field Guides. After prolonged study we flushed the bird and noticed that its feet did not trail out behind him as did the Yellowlegs.

Upon going deeper back into the marsh we came to another pool where more Yellowlegs were feeding, and with them there were three more birds similar to the one we had been watching. We stalked these birds very slowly, with our glasses on them all of the time. They became restless when we were approximately 150 feet away and the Yellowlegs flushed after we had taken a few more steps. The Yellowlegs all made their usual alarm cry as they flew away. The three strangers did not flush until we were within about 75 feet of them. As they flew away we all noticed that their tails had a black center stripe with a white oval patch on either side, and we were all entirely satisfied that, as we had suspected, they were Ruffs *(Philomachus pugnax)*.—JOHN THOMPSON, *Rocky Mount, North Carolina, August 30, 1962.* (For recent records of Ruffs on the North and South

Carolina coasts see *The Chat*, 23:65, 1959; 25:32, 1961; and 25:33, 1961.—*Dept. Ed)*

Two More Records of the Gray Kingbird in North Carolina. — On July 25, 1962, while visiting the heron rookery of Battery Island, at Southport, North Carolina, the senior author discovered a Gray Kingbird (*Tyrannus dominicensis)* in the top branches of one of the shrubby thickets that abound on the island. The washed-out gray color, large bill, and lack of a white stripe across the tip of the tail feathers, made identification positive. Observations were made with binoculars at about fifty yards. (Having recently returned from a trip to southern Florida, where he had seen this species frequently, Parnell was familiar with the bird.) The kingbird was observed for a period of several minutes, as it made typical flycatcher sorties into the air in pursuit of insects. It was last seen as it chased a Redwinged Blackbird out of sight across the island.

An earlier, but unpublished, record of a single Gray Kingbird was made by Verde Watson on Hatteras Island on March 12, 1957. This bird was watched carefully for thirty minutes as it flew around and perched on wires in a road-side clearing in the woods just west of the town of Buxton. Watson was the naturalist at that time in the Cape Hatteras National Seashore, and gave the details of the record to Quay who was then engaged in a special study of the animal life of the Park.

The four other records of the Gray Kingbird in North Carolina are reviewed by Funderburg and Soots in *The Chat* (23:67, 1959).—JAMES F. PARNELL and T. L. QUAY, *Zoology Department, N. C. State College, Raleigh, North Carolina, November 12, 1962.*

Banded Catbird Recovered.— On May 14, 1962, Mrs. Lewis T. Gates found a dead Catbird *(Dumetella carolinensis)* in a vacant parking lot in the town of Chapin, Lexington County, South Carolina. The bird appeared to be in good condition. Apparently it had flown into a plate glass window. It bore a numbered band and Mrs. Gates forwarded the band to the Patuxent Wildlife Research Center at Patuxent, Md. A reply from the Center shows that the bird was banded on August 18, 1961, in the state of Pennsylvania at or near the town of Dagus Mines in Elk County. Unfortunately the reply card does not show whether or not the Catbird was a nestling or an adult when banded. Nor does it show the name of the bander.—MRS. P. B. HENDRIX, *Rt. 1., Lexington, South Carolina, July 21, 1962.*

Starling Behavior.—Late in the afternoon of August 25, 1962, my wife called to me that a Starling (*Sturnus vulgaris*) was drowning a smaller bird in our bird bath. She had heard the cries of the victim; then saw that the Starling was forceably holding the smaller bird under the water with its bill.

When I went to investigate, the Starling flew away. In the water was the water-soaked and lifeless body of a House Sparrow. There was a large opening in its skull and most of its brain had been eaten away. Bent *(U. S. National Museum Bulletin* 197, 1950) gave several accounts of Starlings' attacking and killing other birds, but no mention was made of its feeding on any part of the victims.—WILLIAM C. GRIMM, *15 Strawberry Drive, Route 3, Greenville, South Carolina, September 2, 1962.*

Yellow-headed Blackbird at Raleigh, North Carolina. On May 4, 1962, I watched an adult, female Yellow-headed Blackbird *(Xanthocephalus xanthocephalus)* alight in a small cattail marsh south of the Raleigh city limits on the State Hospital Dairy Farm. Immediately the blackbird was beset by several resident Redwings. After several minutes of harassment, during which time the yellow throat and other field marks were closely observed through 7X50 binoculars, the bird flew about 200 yards across a grain field and perched in an isolated tree. It remained there for about five minutes, allowing an approach to within thirty yards, and then still harassed by the Redwings, it flew out of sight.

This observation is especially interesting in that it was in this same area that Quay and Goodson, on August 15, 1952, collected the only other individual of this species reported from Wake County (*Chat*, 16:101, 1952).

There are three other records for North Carolina according to *Birds of North Carolina* (1959). Details of those records appeared in *The Chat*, **16**: 26, 1952; **17**:45, 1953; **22**:29, 1958. A recent South Carolina observation is also record in *The Chat*, **25**:42, 1961.—JAMES F. PARNELL, *Zoology Department, North Carolina State College, Raleigh, North Carolina, September 5, 1962.*

Baltimore Oriole Breeding in Guilford County, North Carolina.—In North Carolina the Baltimore Oriole *(Icterus galbula)* is listed as a summer resident only in the mountains *(Birds of North Carolina,* 1959). In Guilford County the bird is listed as a transient *(Chat,* **18**:38, 1954).

For the second successive year the Baltimore Oriole has been observed nesting in Guilford County. Both records were in the Horsepen Creek area northwest of Greensboro. As the creek empties into the headwaters of Lake Brandt a marsh of about 3 or 4 acres in size is created. The marsh is bounded by pasture, lake (open water), and mixed hardwood forest.

On the Spring Count (May 6, 1961) a male was seen in a large sycamore by Larry Crawford and George Smith. On May 13, 1961 Crawford observed the male singing again in the same tree and on the following Saturday (May 20, 1961) he watched both male and female bringing food into the tree, but was unable to locate the nest. On the next day the nest was finally located, and both birds were observed feeding the young. Attempts to collect the nest, located about 20 ft. up in the sycamore and hanging directly over the stream, were unsuccessful.

Again this year, on the Spring Count (May 5, 1962) a male Baltimore Oriole was seen singing in a sycamore (not the same tree as the previous year) by George Smith and myself. Further observations were not made until May 17, at which time I observed both male and female at the nest site. The nest was located approximately 65 ft. up in a young solitary sycamore about 300 yards out in the marsh. On May 18, the male was observed in the tree. The female was not seen and was assumed to be incubating. Both birds were bringing food to the nest on May 24. Subsequent observations on June 16, 17, 19, 20 were made, but neither young nor adults were seen.

On July 20 I succeeded in collecting the nest. Examination of the nest showed an outside lining of dried plant fibers, white string, black horsehair, and brown twine. The inner lining consisted of horsehair, grass, and leaf fragments. The nest has been added to the collection at the Greensboro Junior Museum. —BRAD HAWKINS,—Director, Greensboro Junior Museum, *Greensboro, North Carolina, August 2, 1962.*

Some Summer Species on Mt. Mitchell, North Carolina.— The following is a list of the birds observed by my wife and me on Mt. Mitchell, Yancey County, North Carolina on August 2 to 5, 1962. They were all seen at altitudes between 5500 and 6500 feet. Our most interesting encounter was with a pair of Red Crossbills (*Loxia curvirosta*) which fed on cracked corn near our cookout oven and were seen on successive days. The following species were observed:

Ruby-throated Hummingbird, Hairy Woodpecker, Downy Woodpecker, Horned Lark, Common Raven, Red-breasted Nuthatch, Winter Wren, Catbird, Robin, Kinglet (sp.?), Cedar Waxwing, Solitary Vireo, Black-and-white Warbler, Black-throated Blue Warbler, Black-throated Green Warbler, Blackburnian Warbler, Pine Warbler, Hooded Warbler, Red Crossbill, Rufous-sided Towhee, Slate-colored Junco, and Song Sparrow. —JOHN P. DAVIS, *821-823 Nissen Building, Winston-Salem, North Carolina, August 20, 1962.*

BOOKS REVIEWS

Check-list of Birds of the World. A continuation of the work of James L. Peters; edited by Ernst Mayr and James C. Greenway, Jr. Volume XV. 315 pages. 1962. Museum of Comparative Zoology, Cambridge, Mass. $7.50.

Here is another issue of the valuable Peter's "Check-list" series, eight other volumes having been published previously. Of some apparent confusion is the spasmodic appearance of these volumes, but this is understandable when one realizes that many specialists contribute time and knowledge so that manuscripts are completed at varying intervals. We can but hope for an early time when the set will be completed.

The current volume contains species in the last eleven families of the order Passeriformes: Ploecidae (weaverbirds) through Corvidae (crows and jays). For each recognized species in the world the following succinct information is given—reference to the publication of the original description, all the recognized subspecies, some common names, and complete geographic ranges.

Although this is a somewhat technical publication, it contains a wealth of data for the serious-minded bird student.—David W. Johnston

BRIEFS FOR THE FILES

Common Loon, 1 molting, with one or two bare outer primary shafts showing, captured on beach at Garden City Beach, S. C., July 16 and promptly released at sea, Mrs. R. C. Tedards; 1 at Oregon Inlet, N. C., August 8, Paul W. Sykes, Jr. • **Pied-billed Grebe**, nest with downy young and 3 nests with 1 to 5 eggs, Allendale County, S. C., May 4, William Post. •**Gannet**, 1 at New River Inlet, N. C., August 19, an early date, Hallem Walker. • **Great Blue Heron**, 6 pairs nesting at Hilton Head Island, S. C., March 24, Mrs. W. E. Butler • **Cattle Egret**, a flock of about 20 remained for three weeks around April 29 at the Howard Gamble farm near Durham, N. C., fide Mrs. George C. Pyne, Jr. • **Louisiana Heron**, 1 in mountainous Ashe County, N. C., May 6, Mrs. A. B. Hurt. • **Wood Ibis**, 8 circling over the yard on Wadmalaw Island, S. C., June 21, B. R. Chamberlain; 27 over Ashley River at Charleston, S. C., October 5, Mrs. M. D. Richardson. • **Black Duck**, 2 on June 1 and 1 on June 19 at Greensboro, N. C., Brad Hawkins. • **Gadwall**, 4 at Bodie Island, N. C., June 26, Frederic R. Scott. • **Green-winged Teal**, 1 on and over a small pond at Dixie Plantation, Charleston County, S. C., on August 16, the only summer record for the state, as far as we know, John Henry Dick. • **Wood Duck**, 28 eggs, readily divisable into 2 sets of 11 and 17 by size and color, in an old Pileated Woodpecker nesting hole, Charleston County, S. C., April 7, Roy Baker. • **Canvasback**, 1 female, Greensboro, N. C., March 25, Brad Hawkins. • **Red-shouldered Hawk**, nest with 2 eggs, Charleston County, S. C., March 17, Roy Baker. • **Marsh Hawk**, 1 at Carolina Beach, N. C., September 29, Mrs. Mary Urich; 1 at Rantowles Creek, Charleston County, S. C., September 7, Robert H. Coleman. • **Peregrine Falcon**, 1 at Greensboro, N. C., April 9, Brad Hawkins. • **Sparrow Hawk**, 1 at Hilton Head Island, S. C., September 3, Mrs. Carolina Newhall. • **Sora**, 1 near Wrightsville Beach, N. C., May 2, Mrs. Dot Earle. • **Piping Plover**, 1, Mt. Pleasant, S. C., August 10, Ellison A. Williams; 4 at Ashley River Bridge, Charleston, S .C., September 8, Edwin L. Blitch, III. • **Black-bellied Plover**, 1 at Topsail Island, N. C., August 19, Hallam Walker. • **Upland Plover**, 2, at Edisto Beach, S. C., April 14 and 2, April 25, Mrs. B. H. Guy and Mrs. Paul Atwood. • **Spotted Sandpiper**, absent from Wrightsville Beach area, N. C., from May 26 to July 1, Mrs. Dot Earle. • **Greater Yellowlegs**, flock of 13 at Greensboro, N. C., March

25, Brad Hawkins. • **White-rumped Sandpiper,** 2, Greensboro, N. C., May 11, Brad Hawkins. • **American Avocet,** 20 at Pea Island, N. C., August 5, H. A. and F. S. Hespenheide, and Paul W. Sykes, Jr. • **Black-necked Stilt,** about 40 in a breeding colony on Bodie Island, N. C., the second week of May, where a scrape with eggs was photographed, Edwin D. Schneider of Verona, N. J.; and up to one dozen adults present there and apparently breeding, June 26, Frederic R. Scott. • **Black Tern,** 4, 3 of them in breeding plumage, at Bodie Island, N. C., June 26, Frederic R. Scott. • **Ground Dove,** "a few" at Garden City Beach, S. C., May 10, Mrs. J. U. Whitlock. • **Black-billed Cuckoo,** 1 at Bodie Island, N. C., August 5, H. A. and F. S. Hespenheide, and Paul W. Sykes, Jr. • **Hairy Woodpecker,** nest with young, Charleston County, S. C., April 21, Edwin L. Blitch. • **Gray Kingbird,** 1, Beaufort County, S. C., July 21, Robert Russell, Wilmette, Ill. • **Western Kingbird,** 1 at Hilton Head Island, S. C., October 5, Mrs. Caroline Newhall; 1 near Carolina Beach, N. C., September 29, Mrs. Mary Urich, Katherine Alexander, and Mrs. Dot Earle. • **Bank Swallow,** 3 at Rantowles Creek, Charleston County, S. C., August 2, Robert H. Coleman and Ellison A. Williams. • **Blue Jay,** approximately 500 in migration near Carolina Beach, N. C., September 29, Mrs. Mary Urich, Katherine Alexander, and Mrs. Dot Earle. • **Yellow Warbler,** 1, Greensboro, N. C., April 7, Larry Crawford. • **Blackburnian Warbler,** 1 or more at Hilton Head Island, S. C., September 22, Mrs. W. E. Butler. • **Bobolink,** 6 or more, Charleston County, S. C., September 3, Robert H. Coleman. • **Brown-headed Cowbird,** 1 immature captured in a building at Greensboro, N. C., July 28, banded and released by Brad Hawkins; a fledgling was watched being fed by a Wood Thrush at Greensboro, July 29, George A. Smith. • **Painted Bunting,** a female at Hilton Head Island, S. C., October 7, Mrs. W. E. Butler. • **Dickcissel,** 1 at Jefferson, N. C., the first reported from that area, May 6, Mrs. A. B. Hurt.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1962 unless otherwise shown.*

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Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat,* the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

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Editor: David W. Johnston, Department of Biology, Wake Forest College Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Rt. 1, Box 48, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Brown-headed Nuthatch carrying fecal sac. Photographed by Jack Dermid of Wilmington, N. C.

A STUDY OF BARN OWLS AND THEIR FOOD

By Mrs. R. C. Tedards

In February, 1962, I received a letter from Dr. David W. Johnston in regard to an account written to Mrs. A. R. Faver concerning Barn Owls *(Tyto alba)* in the vicinity of Anderson, South Carolina. Dr. Johnston suggested that it might be of interest of readers of *The Chat* if an analysis of the owl pellets was made over a period of several months, and the results, along with the activities of the owls, were reported at the end of that time. So this is the story of a family of Barn Owls in Anderson County, South Carolina.

The owls were first observed by the writer on January 17, 1962. At this time there were seven birds. Five of them were known to roost in the hollow trunk of a White Oak, part of a grove in which the house of the J. W. Glenn family is located. The entrance to the roost was through a hole eighteen inches in diameter and twenty feet up the trunk.

Through conversation with the family on whose property this roost is located, I learned that the owls have been nesting in this immediate vicinity since the property was acquired thirty years ago, and that the birds were resident there at the time the property was bought. I was also told by the family, that they have personally observed two broods of young. One brood consisted of four birds out of the nest and another of three, still in the down. Both of these broods were seen in the early spring. On May 4, 1962, on the Anderson Spring Count, three downy young were seen. All three of these broods were found in the tree where the birds were first seen by the writer. A subsequent investigation of this tree in August, 1962, indicated it to be abandoned, and the three hollow was completely filled with an accumulation of broken down pellets and droppings.

At the present time there are two owls in residence, and they have moved to an adjacent tree for roosting. This particular tree is a Black Oak, approximately the same height as the abandoned tree. with a hollow that extends almost the whole length of the trunk. Both of these trees are located not more than ten feet from a heavily traveled rural road, and in view of the fact that casualties of Screech Owls are quite heavy along our rural roads. I think it is surprising that these Barn Owls have escaped the same fate. The only incidence of one of these owls having collided with a car in the vicinity of the roost occurred about five years ago. Shortly after sundown one of the owls flew into the windshield of a man's car. He assumed that the bird was dead, picked it up, and put it on the back seat with the intention of having it mounted. After he had driven about two miles from the scene of the accident, he said that he had the feeling that someone was looking over his shoulder. He turned and looked in the back of the car and the owl was sitting on the seat looking at him. He hastily turned the car around, took his passenger back, and released him.

A more detailed description of the nesting and roosting territory and the surrounding environment is in order here. The specific location is four miles west of Anderson. The Glenn farm consists of 300 acres of rolling land typical of the upper Piedmont area of South Carolina. The house is situated on a hill in a grove consisting mostly of oaks with some pine and Red Cedar. The farm, which was once planted in cotton and small grains, is now uncultivated. About 200 acres were planted in Loblolly Pine three years ago. Between the pines the fields have a growth of broomsedge, blackberry, and honeysuckle, and various native weeds and grasses. The property is substantially unwooded except for the grove in which the house is situated, hedgerows grown to plum and sassafras, and about forty acres of mixed pine and deciduous woods in the rear of the house. There are two creeks on the property. One runs through a marshy field and at right angles into a second creek which flows through the woods behind the house. Except to the west and south where there is mostly open farmland, the property is adjacent to suburban and industrial areas.

SMITHSONIAN INSTITUTION APR 22 [illegible]

The times that I have observed the owls out hunting leads me to believe that they don't forage any great distance from the roosting sites. When I have watched them, they have made relatively short forays into the fields. At least this seems to be the pattern when they are first off the roost. More extensive observation would be necessary to determine their later activities. I have learned that they are most vocal immediately after coming off the roost, and between the hours of two and four A M.

Although I have seen Barn Owls hunting in the daytime, I have never seen these particular ones engaged in any daytime activity. At all times that I have had them under observation, I have not seen one come off the roost until two or three minutes after official sundown.

Below are the analyses of four groups of pellets sent to Dr. Johnston for examination.

These pellets were collected over a period of several months from January, 1962, through August of that same year. I think it is interesting that in all the prey items identified by Dr. Johnston, the Cotton Rat is by far the most important item, regardless of the time of year. A similar analysis of the food of the Barn Owl was made by James H. Jenkins (MS and 1955) at Bogart, Georgia, about eight miles west of Athens. These studies were completed in 1949 and 1950. The percentage of rodents (rats, mice, and shrews) taken by the Barn Owl constituted approximately 95 per cent of the diet in the Piedmont area of Georgia as well as in South

Pellets Picked Up on March 12, 1962

No. pellets examined—32

Prey items identified	**No. found**	**No. pellets found in**	**Percent of total items**	**Percent of pellets containing this item**
Cotton Rat	29	20	43.3%	62.5%
Least Shrew	16	7	23.9%	21.9%
House Mouse	5	2	7.5%	6.3%
Meadow Vole	1	1	1.5%	3.1%
Short-tailed Shrew	1	1	1.5%	3.1%
Harvest Mouse	1	1	1.5%	3.1%
White-footed Mouse (sp?)	1	1	1.5%	3.1%
Meadowlark	1	1	1.5%	3.1%
Beetle Elytra	1	1	1.5%	3.1%
Unidentified Rodent Parts	11	8	16.4%	25.0%
Total	67			

Pellets Picked Up on February 26, 1962

No. pellets examined—29

Prey items identified	**No. found**	**No. pellets found in**	**Percent of total items**	**Percent of pellets containing this item**
Cotton Rat	20	20	38.5%	69.0%
Least Shrew	9	4	17.3%	13.8%
Meadow Vole	5	5	9.6%	17.2%
Harvest Mouse	4	3	7.7%	10.3%
Short-tailed Shrew	2	2	3.8%	6.9%
White-footed Mouse (sp?)	1	1	1.9%	3.4%
House Mouse	1	1	1.9%	3.4%
Meadowlark feathers	1	1	1.9%	3.4%
Vesper Sparrow	1	1	1.9%	3.4%
Savannah Sparrow	1	1	1.9%	3.4%
Unidentifed Rodent Parts	5	5	9.6%	17.2%
Unidentified Shrew Parts	2	2	3.8%	6.9%
Total	52			

Pellets Picked Up on April 12, 1962

No. pellets examined—24

Prey items identified	No. found	No. pellets found in	Percent of total items	Percent of pellets containing this item
Cotton Rat	14	13	25.9%	54.2%
House Mouse	9	6	16.7%	25.0%
Least Shrew	8	4	14.8%	16.7%
Meadow Vole	4	3	7.4%	12.5%
Harvest Mouse	3	3	5.6%	12.5%
White-footed Mouse (sp?)	3	3	5.6%	12.5%
Bird (passerine, sp?)	2	2	3.7%	8.3%
Meadowlark Feathers	1	1	1.9%	4.2%
Unidentified Bird	1	1	1.9%	4.2%
Unidentified Rodent Parts	7	7	13.0%	29.2%
Unidentified Shrew Parts	2	2	3.7%	8.3%
Total	54			

Pellets Picked Up on August 13, 1962

No. pellets examined—8

Prey items identified	No. found	No. pellets found in	Percent of total items	Percent of pellets containing this item
Cotton Rat	9	6	64.3%	75.0%
White-footed Mouse (sp?)	1	1	7.1%	12.5%
Meadow Jumping Mouse	1	1	7.1%	12.5%
Orthoptera Remains	1	1	7.1%	12.5%
Unidentified Rodent Parts	2	2	14.3%	25.0%
Total	14			

Carolina. The Cotton Rat is also preferred by the Georgia birds. Birds taken by the owls consist of only a small percentage of the total items. Similar studies by Jenkins and Ivan R. Tomkins (1946) in the lower coastal plain of Georgia show that the percentage of birds taken there is higher than in the Piedmont. Whereas the birds taken in the Piedmont were Meadowlarks and sparrows (Savannah, Vesper, Swamp, Grasshopper, and Pine-woods), of the birds taken in the Georgia coastal plain over one-half were members of the Icteridae.

In the coastal plain, Rice Rats and "old field" shrews were the preferred rodent items. Quite probably in all of these studies it is the availability rather than the preference that dictates the kind of prey taken. To add emphasis to the above assumption is the fact that we have reason to believe the Anderson owls, which up until this time have lived in apparent harmony with the Glenn pigeons, may have recently taken several pigeons as prey. Although not conclusive, the evidence is certainly strong in that direction. A number of pigeon wings were found under one of the trees, and the pigeons have vanished.

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Route 2, Brown Road, Anderson, South Carolina, February 11, 1963

CHRISTMAS COUNT—1962

By David W. Johnston

During the 1962 Christmas Count period, 24 counts were made in the Carolinas and are compiled in this report. 185 species and 1,039,844 individuals were reported, both of these figures being considerably less than the 1961 count figures (193 and 2,439,365). Especially high counts were from Wilmington (144 species), Charleston (136), and Hilton Head Island (134). Among the most interesting observations were **Blue Goose** (Winston-Salem), **White-winged Scoter** (Hilton Head), **Great Crested Flycatcher** (New Bern), **Northern Shrike** (Crumpler), **Ovenbird** (Wilmington), and **Grasshopper Sparrow** (Crumpler). As compared with recent counts, there were significant increases in numbers of the Wood Duck, Canvasback, Bufflehead, Surf Scoter, Common Scoter, Ruddy Duck, Clapper Rail, Whimbrel, Great Black-backed Gull, Horned Lark, and Fish Crow.

The most notable impression of the 1962 count, however, is the marked decrease in a significant number of species. *No* eagles or Cattle Egrets were reported. Red-breasted Nuthatches and Evening Grosbeaks, both species noted for fluctuations in their occurrences, were down in numbers. Starlings were too, but this was partly due to the Greensboro count (see that locality's report). In fact, the count in 1962 showed 70 species with a decrease in individuals over the 1961 count and 42 species with a decrease in individuals over both the 1960 and 1961 counts. On the other hand, Bluebird numbers, although not especially high, were not significantly off, and Baltimore Orioles continued to increase.

Weather conditions before and during the count period were, in general, not ideal for counting birds. On the specific count days, the weather was as follows: (1) Coastal localities—temp., 17°-60°, mostly cloudy and rainy; (2) Coastal Plain—temp., 26°-58°, some rain and icy conditions; (3) Piedmont—temp., 14°-50°, rain, sleet or clear and cold; (4) Mountains—temp., 20°-40°, cloudy and frozen ground or snow. It is likely that these harsh conditions contributed to the smaller count this year as indicated above. The decrease in number of species and number of individuals in 1962 (as compared with 1960 and 1961) cannot be attributed to number of observers or party-hours because there were more observers (297) and more party-hours (817) in 1962 than in 1960 or 1961.

Aiken, S. C. (all points within a 15-mile diameter circle, center at Aiken Training Track; swamps and ponds 50%, fields and pastures 30%, mixed woods 15%, pine woods 5%).—Dec. 22; 5:30 AM to 5:30 PM. Rain in AM; temp. 38-58°; wind, SW 5 mph. Two observers in 1 party. Total party-hours, 12 (10 on foot, 2 by car); total party-miles, 38 (3 on foot, 35 by car). **Total species, 69; total individuals, 94,791.**—William Post, Jr. (compiler), Thomas M. Rial.

Anderson, S. C. (all points within a 15-mile diameter circle, center at Anderson Airport, including Hartwell Lake backwaters and the city of Anderson and towns of Star and Sandy Springs; open fields and pasture 25%, deciduous woods 20%, pine woods 20%, mixed woods 15%, ponds and creeks 5%, town 5%, Hartwell area 10%).—Dec. 30; 6 AM to 6 PM. Clear; temp. 21-49°; wind WSW 0-5 mph. Eleven observers in 4 parties. Total party-hours 28 (24 on foot, 4 by car); total party-miles, 197 (17 on foot, 180 by car). **Total species, 68; total individuals, 183,861.** (Seen in area during count period but not on count day; Mallard, Hooded Merganser, Ring-necked Duck, Turkey Vulture, Cooper's Hawk.) The Palm Warbler was observed at very close range (9 ft.) by Mr. and Mrs. Tedards. All field marks were carefully observed, plus the tail-wagging habit of this bird. We no longer believe that the White-crowned Sparrow can be considered unusual in this area.

They have been seen on four consecutive counts in increasing numbers and are now regular migrants and winter visitors here.—Mr. and Mrs. R. C. Brownlee, Mr. and Mrs. C. B. Nichols, Barbara Ramseur, Douglas Tedards, Mr. R. C. Tedards, Mrs. R. C. Tedards (compiler), Reggie Titmas, Bob Watson, Mrs. Caroline Watson.

Central Beaufort Co, N. C. (all points within a 15-mile diameter circle, center where Upper Goose Creek enters Pamlico River, including both sides of the river from Bath to Washington; river and river shore 50%, fields 30%, mixed woods 10%, pine woods 2%, feeders 8%).—Jan. 1, 1963; 7 AM to 5 PM. Fair; temp. 17-35°; wind NNW, 0-19 mph; ground bare and frozen, swamps and ponds frozen, river partly frozen. Thirteen observers (3 part-time) in 4 parties. Total party-hours, 31 (17 on foot, 13 by car, 1 by plane); total party-miles, 197 (8 on foot, 109 by car, 80 in plane). **Total species, 87, total individuals, 13,661.** 750 Lesser Scaup are included in this count. (Seen in area during count period, but not on count day: Common Loon, Double-crested Cormorant, Common Goldeneye, Hooded Merganser, Barred Owl, Loggerhead Shrike, Yellow-throated Warbler.) The great numbers of waterfowl were recorded by Federal and State Wildlife men who checked the river by plane. The **Tree Swallows** were seen by many people, it being the first recorded in the area. The **Black-and-white Warbler** was seen in the same place several times during the fall, and the Yellow-throated Warbler, though missed on the count day, had been seen daily at a window-feeder.—Ethel Barkley, Ruth Brown, Margaret Conderman, Geraldine Cox (compiler), Otto Florschutz, Lily Grimes, James MacLaurin, Mary MacLaurin, Ed Marrow, Sue Meadows, Alvin Noltemeier, Louise Satterthwaite, Marjorie Warren.

Chapel Hill, N. C. (all points within a 15-mile diameter circle, center at intersection of Columbia and Franklin streets, including town of Chapel Hill and University Campus, Carrboro, Airport, Lake Forest and University Lakes, Finley Golf Course and Mason's Farm; mixed deciduous woodlands 25%, open fields and farmlands 30%, pond, lake shores and creek banks 25%, pinewoods 5%, wooded residential 15%.)—Dec. 30; 7 AM to 4:30 PM. Clear; temp. 25-38°; wind NW, 15-23 mph. Seventeen observers in 10 parties. Total party-hours, 53 (42 on foot, 11 by car); total party-miles, 74 (20 on foot, 54 by car). **Total species, 64; total individuals, 2925.** (Seen in area during count period but not on count day: Pileated Woodpecker.) Ten Lesser Scaup were seen.—David Barnes, Mr. and Mrs. Charles H. Blake, William T. Dye, Robert H. Helle, Dr. and Mrs. J. Logan Irvin, Mrs. Wallace Patterson, Wallace Patterson, Jr., Phillips Russell, Mrs. Pearson H. Stewart, Elizabeth P. Teulings, Robert P. Teulings (compiler), Mr. and Mrs. Matt L. Thompson, Mrs. Adelaide Walters, Mrs. Fred R. Weedon.

Charleston, S. C. (all points within a 15-mile diameter circle, center 14 miles NE of Mt. Pleasant and ½ mile E of U. S. Hwy 17, to include Bull's Island, and extending NW across adjacent waters and marshes and the mainland opposite and beyond the Wando River: fresh water ponds and wooded swamps 25%, mixed and pine woods 25%, open fields and farmland 20%, salt-water creeks, marshes and flats 25%, dunes and ocean front 5%).—Dec. 29; 6:30 AM to 5:30 PM. Overcast, cloudy, rain; temp. 40-60°; wind variable, 10-20 mph, guests to 40 mph, visibility poor. Thirty observers in 7 parties. Total party-hours, 64 (30 on foot, 27 by car, 7 by boat); total party-miles, 272 (40 on foot, 207 by car, 25 by boat). **Total species, 136; total individuals,** 8077. The 92 scaups were not identified to species. (Seen in area during count period, but not on count day: Fulvous Tree Duck, Cinnamon Teal, Redhead, White-winged Scoter, Common Scoter, Bald Eagle.)—Mr. and Mrs. Roy Baker, Mr. and Mrs. John Banghart, Mrs. Francis Barrington, T. A. Beckett, III, Mr. and Mrs. E. L. Blitch, Mrs. J. A. Boone, B. R. Chamberlain, E. B. Chamberlain (compiler), David Chamberlain, N. A. Chamberlain, III, E. C. Clyde, Mrs. R. H. Coleman,

E. A. Cutts, R. D. Edwards, R. L. Edwards, J. L. Hanna, J. M. Horlbeck, Peter Manigault, I. S. H. Metcalf, John Metcalf, Denton Owens, Mrs. Margaret Retallack, Mrs. M. D. Richardson, H. P. Staats, Elizabeth D. Simons, A. M. Wilcox, E. A. Williams.

Charlotte, N. C. (all points within a 15-mile diameter circle, center at intersection of 7th St. and Briar Creek as in past 20 years; commercial and residential building have almost destroyed habitat in northeastern and southeastern sectors; deciduous-pine woods and edge 35%, open fields 35%, streams and ponds 10%, city yards 20%).—Dec. 29; 6:30 AM to 5:30 PM. Rain in AM; intermittent in PM; temp. 30-44°; wind NNE, 5-13 mph; ground bare, water open. Thirteen observers in 4 parties. Total party-hours 26 (8½ on foot, 17½ by car); total party-miles, 273½ (9½ on foot, 264 by car). **Total species, 50; total individuals, 4966.** (Seen in area during count period but not on count day: Marsh Hawk.)—Mrs. Edwin O. Clarkson, Mrs. W. G. Cobey, Miss May Fraley, Miss Meade Fraley, J. P. Hamilton, Lee Jones, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mrs. Preston Nowlin, Frank Ramsey, Dennis Shepler, William Smith, Jim Tyrrell (Cardinal Bird Club, Mecklenburg Audubon Club, guests.)

Columbia, S. C. (all points within a 15-mile diameter circle, center State Capitol as last year; deciduous river and creek swamps 32%, pine woods 12%, open fields 40%, lake shores 4%, urban 12%).—Dec. 31; 7:00 AM to 5:30 PM. Clear; temp. 26-47°; wind N, 5-8 mph; Seven observers in 3 parties. Total party-hours, 24 (14 on foot, 10 by car); total party-miles, 116 (18 on foot, 98 by car). **Total species, 66; total individuals, 23,747.**—Mrs. William T. Beck, Mr. Gilbert Bristow (compiler), Mr. Gordon Brown, Mrs. Annie R. Faver, Mrs. Robert Overing, Mr. Al Sanders, Mrs. Clyde Sisson.

Crumpler, N. C. (all points within a 15-mile diameter circle centering at Hurt's farmhouse—same area as Spring Count. Heretofore the Christmas Count has centered at Todd P. O. This year's area includes practically the same type terrain, except there is no accessible mountain such as The Bald).—Dec. 27; 7 AM to 5 PM. Mostly clear; temp. 25-35°; no wind; four inches snow with frozen crust. Ten observers in 3 parties. Total party-hours, 27 (10 on foot, 17 by car); total party-miles, 125 (20 on foot, 105 by car). **Total species, 32; total individuals, 1556.** The increase in some species in this years count over the 1960 count are: Bobwhite, nearly 7 times as many; Tufted Titmouse, nearly 7 times; Eastern Meadowlark, 20 times; Cardinal, 2¾ times; Slate-colored Junco, twice as many. The change of area may partly account for this. Four species (including Killdeer and Purple Finch) have not been seen on any previous count, and our count of individuals is the highest ever. It was good to see the Bluebird count go up. The most spectacular item was the **Northern Shrikes**—one adult, one brownish immature. These were found by separate parties (B. K., B. C.). A careful study was made. Four **Grasshopper Sparrows** were studied in detail (B. C., *et al.*) in a broomsedge field, the significant. identifying field markings being noted. (Seen in area during count period but not on count day: two Great Horned Owls, one Screech Owl).—Annie Jean Blackburn, Ann Carter, Betty Carter, Mrs. A. B. Hurt (compiler), Mrs. Beulah Kiser, David Kiser, Dr. Elam S. Kurtz, Mike Kurtz, Alice Lyall, Mike Welch.

Elkin, N. C. (area same as last several years).—Jan. 1, 1963; weather fair; temp. 14-40°; wind NW, light. Lakes and ponds frozen. Rivers and creeks open. Seven observers. **Total species, 52; total individuals, 4115.** (Seen in area during count period but not on count day; Catbird, Cedar Waxwing, Common Grackle.)—Dick Atkinson, Harold Click, Gary Dornburg, Lin Hendren (compiler), E. M. Hodel, Bobby Pardue, Wendell P. Smith.

Great Smoky Mountains National Park, Tenn.-N. C. (all points within a 15-mile diameter circle centered on Bull Head of Mt. LeConte; same general area as previous counts).—Dec. 30; 7:15 AM to 5:30 PM. Clear; temp. 20-38°; wind 3-15 mph; ground bare, mostly frozen. Thirty-three observers in 10 parties. Total party-hours, 81 (70 on foot, 11 by car); total party-miles, 210 (65 on foot, 145 by car). **Total species, 59; total individuals, 3638.** Unusual "finds" included: Ring-billed Gull, 51 Bluebirds, and 10 Evening Grosbeaks. Both Black-capped and Carolina species are included in the count of 304 chickadees.—Carlos C. Campbell, James Campbell, Mr. and Mrs. Robert J. Dunbar, John Elson, Mary Enloe, Mr. and Mrs. W. F. Gallagher, Mr. and Mrs. H. C. Garlinghouse, David Highbaugh, Phillip Huff, Elsie S. Janson, Helen K. Lewis, Dorothy J. MacLean, Mrs. George W. McGown, Mr. and Mrs. Robert A. Monroe, Julia I. Moore, Mrs. Earl F. Olson, Mrs. E. E. Overton, Neil J. Reid, Mr. and Mrs. Louis F. Smith, Jr., Arthur Stupka (compiler), Mr. and Mrs. Thomas C. Swindell, Dr. James T. Tanner, Dr. Samuel R. Tipton, Mr. and Mrs. W. J. Vaughn, Mr. and Mrs. George R. Wood (Tennessee Ornithological Society, National Park Service, and guests).

Greensboro, N. C. (all points within a 15-mile diameter circle, center ½ mile SW of WBIG Transmitter as in 1961; deciduous and pine woods 25%, thickets 20%, fresh-water lakes and ponds 30%, open fields 10%, marsh and wooded swamps 10%, lawns and parks 5%.)—Dec. 29; 6:30 AM to 5:30 PM. Rain to sleet and freezing rain; temp. 31-36°; wind ENE, 8 mph. Thirty observers in 10 parties. Total party-hours, 80½ (8½ on foot, 72 by car); total party-miles, 293 (9 on foot, 284 by car). **Total species, 73; total individuals, 615,297.** (Seen in area during count period but not on count day: Black Duck, Turkey Vulture, Common Snipe, Pine Siskin.) Eighteen Lesser Scaup were seen. This was not a particularly spectacular count since the total number was considerably below last year. Two factors were involved. First the weather on the count day caused less time in the field on foot and a decrease in numbers of some species (most notably ducks and open-country species) but did not affect the numbers of other species. Secondly, there was a large decrease in numbers of "blackbirds" in the roost. Earlier in the year the roost was comparable to last year. Shortly before the count day the roost moved and the group split up. We have still been unable to locate the "other half."—Helen Bedon, Mrs. Locke Bell, Mrs. Jack Brown, Mrs. J. A. Cannon, Mrs. Ellene Cobb, Inez Coldwell, Mrs. Floyd Craft, Larry Crawford, Kelly Culbreth, Mr. and Mrs. G. W. Daniels, Mrs. R. D. Douglas, Charlotte DuBois, Brad Hawkins (compiler), Mrs. James Heilig, Fred Hinton, Bruce Kappel, Robert Lasley, James Cattocks, Mrs. Robert McCoy, Ethel McNairy, Ida Mitchell, Mrs. Jack Perdue, Mr. and Mrs. George Perrett, Etta Schiffman, Archie Shaftsbury, George Smith, Thomas Street, Mrs. C. R. Surratt, (Piedmont Bird Club.)

Greenville, S. C. (same area as in previous years, centered at upper part of the city; pine and deciduous woods 30%, open fields and border thickets 65%, reservoirs and ponds 5%).—Jan. 1, 1963; 9:00 AM to 5:00 PM. Fair and cold, temp. 28-38°. Four observers in one party. Total party-hours, 9. Total party-miles about 50 (4 on foot, 46 by car.) **Total species, 31; total individuals, 445.**—Mrs. W. B. Lawrence, Ruth Gilreath, May Puett, Rosa Lee Hart (compiler).

Henderson, N. C. (from Lake Lucy to Satterwhite's Point, about 12 to 14 miles down the highway and on two or three side roads for short distances, including lakesides and lakes 30%, roadsides 30%, deciduous and pine woods 15%, field edges and meadows 20%, lawns and feeders 5%).—Dec. 27; 8 AM to 4:15 PM. Cloudy with a few drops of rain in AM, clearing in the PM. Temp. 30-47°; winds about 5-8 mph. Three field observers in one party (one dropped out at noon and was replaced by another.) Three others watched their own lawns and feeders. Total hours out, 8¼; total miles, 40 (5 by foot, 35 by car). **Total species, 58; total in-**

dividuals, 3120. Unusual for this area were the appearance of **Canada Geese**, honking and flying in formation over Nutbush Creek, and the many ducks and gulls on the water. Most of the ducks and gulls were too far out for us to identify.—Mariel Gary, Annie Gray Burroughs, Mrs. A. W. Bachman, Garnette Myers (compiler).

Hilton Head Island, S. C. (all points within a 15-mile diameter circle with center at Hilton Head Island Post Office, including Hilton Head Island, Pinckney Island, Collerton Neck, and parts of Bluffton, S. C.; mixed woods 30%, field and fresh water ponds 20%, pine woods 10%, ocean and beach 15%, tidal rivers, creeks and mud flats 25%.)—Dec 27; 6 AM to 6 PM, cloudy and cool. Temp. 45-55°; wind NNE, moderate; rain beginning at 2:45. Thirty observers in 8 parties. Total party-hours 76 (60 by foot; 15 by car, 1 by bicycle); total party-miles 313 (264 by car, 46 by foot, 3 by bicycle). **Total species, 134; total individuals, 20,300** (Seen in area during count period but not on count day: Cattle Egret, Green Heron, Royal Tern, Shoveler, Red-breasted Nuthatch, Bald Eagle, Cooper's Hawk. and Osprey.) The count included the following: 3 White Ibis, (C. N.), 22 scaups (sp. ?), 661 Buffleheads, 4 **White-winged Scoters** (I. R. T., L. D.), 1 **Krider's Red-tailed Hawk** (M. M., C. I., C. N.), 592 Fish Crows, King Rail and the marsh wrens (W. P.).—Mr. and Mrs. C. Alden Baker, Mr. and Mrs. W. H. Branch, Nancy Butler, Dr. L. Davenport, Mrs. Violet Duane, Mrs. and Mrs. Fred Hack, Avery Hack, Mr. and Mrs. David Harrall, Mrs. Alva Hines (compiler), Miss Charlotte Inglesby, Mrs. Arlene Jones, Mr. and Mrs. Henry Lawrence, Mr. and Mrs. G. H. McBride, Marie Mellinger, Caroline Newhall, Frederic Post, William Post, Jr., Mr. and Mrs. Larry Rogers, Mr. and Mrs. Carroll Sergeant, Mrs. Phyllis Stone, Mr. Ivan R. Tomkins, Mrs. Alice Woodring.

Morehead City, N. C. (all points within a 15-mile diameter circle, center at Fort Macon, including towns of Morehead City, Beaufort, and Atlantic Beach, Calico Creek, Sponner's Creek, Crab Point, Newport River, Fort Macon State Park, and Morehead City Country Club; tidal rivers, creeks, marshes, fresh water ponds, and mudflats 30%, open fields and farmlands 20%, dunes and ocean front 5%, mixed woodlands 25%, pine woods 10%, residential 10%).—Dec. 24; 7:00 AM to 5:00 PM. Clear AM, cloudy PM; temp. 36-47°; wind NE, 4-9 mph. Four observers in 2 parties. Total party-hours, 18 (12 on foot, 6 by car; total party-miles, 40 (9 on foot, 31 by car). **Total species, 71; total individuals, 6,424.** (Seen in area during count period but not on count day: Red-throated Loon, Clapper Rail, Dunlin, Bonaparte's Gull, Mourning Dove, House Wren.) Unusual species: Great Black-backed Gull and **Purple Sandpiper**. One of the 61 scaup was identified as a Greater Scaup.—David Barnes (compiler), John O. Fussell, II, John O. Fussell, III, Tom Wade.

New Bern, N. C. (all points within a 15-mile diameter circle, center New Bern Airport, to include Broad Creek and Street's Ferry on the Neuse River, the Hardison Farm on the Trent River, and the city of New Bern; open fields and marshes 45%, mixed pine and deciduous woods 30%, open water 10%, and residential areas 15%).—Dec. 30; 7 AM to 6 PM. Clear; temp. 32-38°; wind N to NE, 5-15 mph. Eleven observers in 5 parties. Total party-hours, 33 (21 on foot, 11 by car, and 1 by boat); total party-miles, 174 (17 on foot, 152 by car, and 5 by boat). **Total species, 84; total individuals, 4351.** (Seen in area during count period but not on count day: Eastern Bluebird.) The **Great Crested Flycatcher** was seen in good light (F. O.), and the upright posture, yellow belly, and rufous tail were carefully noted. Thirty-six Lesser Scaup were observed.—Mr. and Mrs. J. E. Blaylock, Mr. and Mrs. Fred Conderman, Dr. Robert Holmes (compiler), Mr. and Mrs. J. A. Meadows, Frank Olmstead, Thomas A. Sherratt, Sam Sweeny, and Mrs. C. S. Warren.

New London, N. C. (all points within a 15-mile diameter circle, center

2 miles NW or Badin, including High Rock Lake, Tuckertown Lake, Yadkin River, Badin Lake, Morrow Mountain State Park, Albemarle City Reservoir, Albemarle, Badin, New London; mixed deciduous woodlands 20%, open fields and farmland 27%, lakes and river 20%, marsh 3%, pine woods 2%, town suburbs 3%, fresh-water pond and lake shores 25%).—Dec. 27; 6:30 AM to 5:30 PM. Heavy clouds all day; temp. 42-49°; wind NW, 8 mph; visibility poor. Twenty-eight observers in 7 parties. Total party-hours, 48 (22 on foot, 26 by car); total party-miles, 304½ (26 on foot, 278½ by car). **Total species, 58; total individuals, 5479.** (Seen in area during count period but not on count day: Fox Sparrow, Common Grackle.)—Mrs. Wade Crowell, Wade Crowell, Mr. and Mrs. John U. Whitlock, Susan Greene, C. M. Haithcock, Miss Jane Turner, Miss Bennie Wingate, Mrs. S. R. Boyce, Mrs. Claude B. Hinston, Mr. and Mrs. Heath Morgan, George Culp, Joe Ferrebee, Mr. and Mrs. James Mauney, Mr. Donald Maner, Mrs. John Crawley, Mrs. Myron Isenhour, Sr., Mr. Charles Hartsell, Miss Sue Trott Parker, Miss Ruth Arey Parker, Mr. John Trott (compiler), and Mrs. John Trott.

North Wilkesboro, N. C. (the count area had a ten-mile radius and included portions of the Reddies' and Yadkin rivers and part of the W. Kerr Scott Reservoir).—Dec. 24; 7:45 AM to 4:30 PM. Clear until 10 AM, then increasing cloudiness becoming dense in the afternoon. Temp. 28-40°; wind 0-8 mph. Ground bare and only a little ice on quiet water. Three observers in one party. Total party-hours, 26; total party-miles, 31 (5 on foot, 26 by car). **Total species, 39; total individuals. 1283.** (Seen in area during count period but not on count day: Turkey Vulture, Killdeer, Red-bellied Woodpecker, White-breasted Nuthatch, Brown Thrasher, **Orchard Oriole**. The latter, a female, was seen (W. P. S.) twice at close range when the small size, greener upperparts, and other features were noted.)—Flipper Jones, Mark Simpson, Wendell P. Smith (compiler).

Raleigh, N. C. (practically the same area as on previous counts; lakes and small ponds 25%, mixed pine and deciduous woodland 40%. deciduous woodland 20%, open fields 15%).—Dec. 28; 7:30 AM to 5:30 PM. Clear all day; temp. 33-50°; wind 5 mph in early AM, but calm rest of day; ground bare, water open. Seven observers in 4 parties. Total party-hours, 40 (28 on foot. 12 by car); total party-miles, 65 (20 on foot, 45 by car). **Total species, 65; total individuals. 2262.** Four Lesser Scaup were noted—David L. Wray (compiler), J. F. Greene. Mrs. D. L. Wray, J. W. Johnson, Steven Johnson, Mark Johnson, Philip Davis.

Rocky Mount N. C. (all points within a 15-mile diameter circle, center at Battleboro, N. C. to include Swift Creek, Fishing Creek. Braswell, Horne, Watson, Brian, Battle and Anderson ponds; fields and roadsides 40%, lakes and ponds 20%. mixed woods 25%, swamps and marshes 15%).—Dec. 30; 7:00 AM to 5:30 PM. Clear and cold, temp. 35-40°: ground thawing with ice on edges of ponds. Seven observers in 2 parties. Total party-hours 46 (4 on foot and 42 by car); total party-miles, 149 (11 on foot, 138 by car). **Total species, 58; total individuals, 14.578.** The scaup was identified as a Lesser. The 4000 Slate-colored Juncos were estimated. Of the Horned Larks observed, 310 were identified as Northern and 45 as Prairie.—John L. Thompson (compiler), Joyce Bennett, Dan Knight, Norma P. Knight, J. Robert Thomas, Sarah Speight, Carr Speight, Bert Carter.

Seven Springs, Wayne County, N. C. (all points within a 15-mile diameter circle, center Cliffs of Neuse State Park entrance; lakes, ponds, and river 20%, fields and roadsides 40%, swamps and marshes 10%, mixed woods 30%).—Dec. 22; 7 AM to 5 PM. Rain in AM, fair in PM; temp. 30-45°; ice on trees early in AM. Two observers in 1 party. Total party-hours, 10 (3 on foot, 7 by car); total party-miles, 113 (3 on foot, 110 by car). **Total species, 56; total individuals, 2321.** (Seen in area during count period but not on count day: Pied-billed Grebe, Wood Duck, Red-shouldered Hawk, Barred Owl, Brown Creeper, Baltimore Oriole, Common Grackle.) The Horned Grebe was seen by both observers and carefully identified.—Travis L. Herring, Richard H. Siler (compiler).

Spartanburg, S. C. (all points within a 15-mile diameter circle, center Spartanburg, including Zimmerman, Pierce, Johnson and Bowen Lakes, sewage disposal plant; open farmlands 15%, town suburbs 20%, mixed woodlands 10%, fresh water lakes, ponds and marshes 55%).—Jan. 1, 1963; 8 AM to 5:30 PM. Clear; temp. 23-50°; wind NW, 3-4 mph. Six observers in 4 parties, Total party-hours, 23 (10 on foot, 13 by car); total party-miles 36 (6 on foot, 30 by car). **Total species, 56; total individuals, 5606.** The scaups were all Lesser.—Louisa B. Carlisle, Ruth Crick (compiler), L. MacFarland Cates, Jr., Mrs. J. E. Spivey, Dr. John O. Watkins, Mrs. John O. Watkins.

Wilmington, N. C. (all points within a 15-mile diameter circle, center, Myrtle Grove Junction, including Wrightsville Beach and Sound, Masonboro and Greenville sounds, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, Greenfield Lake, Echo Dairy Farm; mixed pine and deciduous woodland 40%, beach and salt marsh 35%, fresh water ponds and river 20%, pasture 5%.)—Dec. 29; 6:30 AM to 5:30 PM. Temp. 36-56°; wind NNE, 12-9/10 mph; cloudy with rain after 11:40 AM. Nine observers in 5 parties. Total party-hours, 43½ hours (17 on foot, 26½ by car); total party-miles, 410 (37 on foot, 373 by car). **Total species, 144; total individuals, 9008.** (Seen in area during count period but not on count day: American Bittern and Hudsonian Godwit.) Unusual species included: 23 **Red Crossbills** reported by C. M. on Masonboro Sound near houses in pine and deciduous trees, and 2 **Ovenbirds** (C. M.) watched carefully at 50 feet on Masonboro Sound. The 342 scaup were identified as Lesser.—Mr. and Mrs. Cecil Appleberry, Maurice Barnhill, Mrs. Betty Everson, Claude McAllister, Mrs. W. C. Mebane (compiler), Mr. and Mrs. John Trott, Mrs. Marie Vander Schalie.

Winston-Salem, N. C. (all points within a 15-miles diameter circle, center at intersection of Interstate 40 and Silas Creek Parkway, including Salem Lake, Reynolds Park, Wake Forest campus and Reynolda, Forsyth County Farm, Tanglewood and adjacent Yadkin River bottoms; pine woods 15%, deciduous woods 20%, fields and pastures 35%, lakes and bottom land 20%, suburban parks and lawns 10%).—Dec. 29; 7:45 AM to 5:30 PM. Cold and rainy; temp. 32-37°; wind E to NE, 10-15 mph. Ten observers in 5 parties. Total party-hours, 25½ (6½ on foot, 19 by car); total party-miles, 105 (18 on foot, 87 by car). **Total species, 56; total individuals, 7,959.** The single **Blue Goose** might be the same one that overwintered here last year.—Hartsell Cash, David Craig, Gardner Gidley, Margaret Gidley, David Johnston, Henry Madden, Thomas Simpson (compiler), John Spinks, Jr., Edith Spinks, Robert Witherington.

	Total Individuals	Beaufort Co., N. C.	New Bern, N. C.	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head, S. C.	Seven Springs, N. C.	Rocky Mt., N. C.	New London, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Charlotte, N. C.	Spartanburg, S. C.	Greenville, S. C.	Anderson, S. C.	Greensboro, N. C.	Winston-Salem, N. C.	Crumpler, N. C.	Elkin, N. C.	North Wilkesboro, N. C.	Gr. Smoky Mts., N. C.
Common Loon	102	..	1	2	21	12	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Red-thtd. Loon	38	..	..	..	18	1	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	307	50	3	19	15	85	133	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Pied-billed Grebe	123	2	22	3	14	29	23	..	..	..	8	9	1	4	..	..	1	..	4	2	..	..	..	1	..
Brown Pelican	43	..	..	1	14	8	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	133	..	..	50	82	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dbl-cr. Cormorant ..	102	..	4	9	26	22	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron ...	133	2	2	5	10	25	34	1	4	2	1	4	7	2	6	..	1	1	11	11	1	..	1	..	2
Green Heron	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Little Blue Heron ..	34	..	..	..	5	7	21	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Egret	55	..	..	1	13	17	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Snowy Egret	56	..	..	1	17	15	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	34	..	..	5	2	6	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Nt. Heron ..	11	..	..	1	2	6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Nt. Heron ..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
American Bittern	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	35	..	..	..	..	32	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whistling Swan	500	500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	1026	450	..	..	125	..	..	12	2	15	..	..	18	..	..	..	..	1	..	2	85	..	304	5	7
Snow Goose	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Goose	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Mallard	903	300	13	..	102	142	22	..	28	..	1	..	..	4	7	..	..	4	..	43	65	..	172	..	..
Black Duck	939	420	6	300	17	110	16	..	10	3	2	..	7	2	2	..	12	..	..	..	2	..	30	..	..
Gadwall	87	25	1	..	..	42	17	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
Pintail	150	..	..	..	40	107	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..
Gr.-winged Teal	438	..	18	..	112	200	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-winged Teal	27	..	1	..	3	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Widgeon	261	7	..	..	50	150	25	..	..	..	..	..	..	12	..	..	..	..	..	13	1	..	3	..	..
Shoveler	348	..	..	..	..	344	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	..	..
Wood Duck	146	5	7	..	7	32	69	..	3	..	..	15	..	..	..	3	..	..	..	..	1	..	4	..	..
Redhead	33	..	..	30	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..
Ring-necked Duck ...	1252	720	73	..	224	45	..	1	1	..	4	1	11	8	115	..	15	8	..	26	..	..	..	..	..

	Total Individuals	Beaufort Co., N. C.	New Bern, N. C.	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head, S. C.	Seven Springs, N. C.	Rocky Mt., N. C.	New London, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Charlotte, N. C.	Spartanburg, S. C.	Greenville, S. C.	Anderson, S. C.	Greensboro, N. C.	Winston-Salem, N. C.	Crumpler, N. C.	Elkin, N. C.	North Wilkesboro, N. C.	Gr. Smoky Mts., N. C.
Canvasback	1146	1020	1	..	3	100	..	..	..	..	..	17	..	..	..	..	..	..	..	5	..	..	..	..	..
Scaup (sp.)*	1361	750	36	61	342	92	22	..	1	..	..	..	..	4	10	..	25	..	..	18	..	..	..	..	..
Common Goldeneye	6	..	..	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bufflehead	1170	200	1	18	58	158	661	..	..	..	..	..	2	15	..	..	..	..	..	57	..	..	..	..	..
Oldsquaw	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White-winged Scoter	4	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surf Scoter	251	250	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Scoter	5294	3000	..	..	..	..	2294	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	2297	1850	1	300	6	83	4	..	..	..	..	..	..	36	..	..	5	..	..	11	..	..	..	1	..
Hooded Merganser	137	..	4	..	27	14	33	3	10	..	..	1	14	16	..	..	5	..	..	10	..	..	..	..	..
Common Merganser	5	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Red-br. Merganser	153	15	6	37	1	69	21	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turkey Vulture	137	4	3	..	3	18	54	..	20	..	2	17	..	1	13	..	2	..	..	..	..	..	..	..	..
Black Vulture	247	..	1	1	5	110	81	..	3	1	1	32	2	1	4	..	..	..	5	..	..	..	..	..	..
Sharp-sh. Hawk	11	..	..	..	1	1	2	..	1	1	2	..	..	1	1	..	..	..	..	..	..	..	..	1	..
Cooper's Hawk	3	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Red-tailed Hawk	75	2	1	..	2	3	12	3	13	1	8	1	1	3	3	..	1	..	7	4	1	..	3	1	5
Red-shld. Hawk	34	..	2	..	6	7	3	..	..	2	1	..	2	1	1	3	..	..	2	3	1	..	..	..	..
Marsh Hawk	74	1	5	..	8	27	13	1	1	2	8	..	1	..	2	..	..	..	3	..	..	..	1	1	..
Osprey	4	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Peregrine Falcon	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pigeon Hawk	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparrow Hawk	263	14	35	12	18	10	37	15	63	13	10	3	3	9	5	..	2	..	6	1	..	2	3	..	2
Ruffed Grouse	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
Bobwhite	797	7	11	3	44	16	23	..	..	39	79	14	36	22	76	60	49	..	120	12	74	34	46	7	25
Turkey	9	..	..	..	..	3	5	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
King Rail	2	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	232	..	..	..	16	158	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Com. Gallinule	47	..	..	..	9	23	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	583	107	150	..	164	85	7	..	..	..	15	..	1	..	..	..	..	1	..	50	3	..	..	..	..
Am. Oystercatcher	484	..	..	7	8	459	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semip. Plover	83	..	..	23	7	18	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Piping Plover	9	..	..	..	3	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	533	24	15	37	104	18	78	3	13	10	112	15	..	2	1	7	52	..	16	3	2	1	..	..	20
Bl.-bel. Plover	281	..	..	4	47	96	134	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	143	..	..	4	1	83	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	8	..	..	..	1	3	1	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Com. Snipe	66	4	1	1	5	19	18	5	2	2	2	1	..	1	..	4	..	..	1	..	..	..	..	..	..
Whimbrel	200	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	6	..	..	1	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willet	95	..	..	..	16	57	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Yellowlegs	163	..	..	1	29	109	23	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Les. Yellowlegs	35	..	..	..	31	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Knot	9	..	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	37	..	..	30	3	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunlin	825	..	..	..	250	213	362	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher (sp.?)	251	..	..	..	2	132	117	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semip. Sandpiper	111	..	..	3	4	13	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Sandpiper	117	..	..	..	3	17	97	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marbled Godwit	192	..	..	..	..	192	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sanderling	339	..	..	72	21	..	246	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	13	5	..	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	3718	370	337	2408	460	62	80	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Ring-billed Gull	1787	29	154	331	185	279	363	..	..	36	173	1	227	..	..	..	..	..	6	2	..	..	..	..	1
Laughing Gull	9	..	1	..	3	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	31	..	..	..	12	..	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	58	..	..	19	7	..	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Tern	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	187	..	..	157	6	2	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	2489	6	22	..	52	62	203	168	23	682	120	22	30	26	88	93	47	10	144	50	144	1	239	200	57
Ground Dove	5	..	..	..	..	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Owl	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Screech Owl	6	1	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	2	..	..	..	..	..	..
Gr. Horned Owl	8	..	..	..	1	..	3	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1
Barred Owl	10	..	..	..	..	1	4	..	..	..	..	1	..	..	1	1	..	..	1	1	..	..	..	..	..
Belted Kingfisher	135	3	2	15	19	24	40	1	1	4	2	3	..	2	2	1	..	..	3	6	2	2	2	..	1
Yel.-sh. Flicker	774	28	71	9	42	70	233	15	35	41	67	17	19	8	31	16	6	1	11	28	10	..	5	2	9
Pil. Woodpecker	95	4	2	2	6	35	18	1	..	..	5	1	..	..	..	..	1	..	..	..	2	..	1	2	15
Red-bel. Woodpecker	302	4	10	2	19	61	51	7	3	19	13	5	4	6	18	11	10	..	10	31	5	..	8	..	5
Red-hd. Woodpecker	90	4	2	2	12	..	20	1	1	7	3	6	1	7	8	1	1	..	3	2	1	8	..	..	..
Yel.-bel. Sapsucker	137	2	4	..	15	21	32	4	..	9	1	2	2	1	11	1	4	..	4	15	2	1	4	..	2
Hairy Woodpecker	66	2	..	..	3	2	14	..	..	7	..	..	..	1	6	2	..	..	2	8	3	1	..	..	15
Downy Woodpecker	259	11	5	2	11	19	13	3	6	9	13	5	5	3	21	8	8	1	11	35	8	18	6	4	34
Red-cock. Woodpecker	12	1	..	..	5	2	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..

	Total Individuals	Beaufort Co., N. C.	New Bern, N. C.	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head, S. C.	Seven Springs, N. C.	Rocky Mt., N. C.	New London, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Charlotte, N. C.	Spartanburg, S. C.	Greenville, S. C.	Anderson, S. C.	Greensboro, N. C.	Winston-Salem, N. C.	Crumpler, N. C.	Elkin, N. C.	North Wilkesboro, N. C.	Gr. Smoky Mts., N. C.
Great Cr. Flycatcher	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Phoebe	112	7	7	..	..	11	44	2	..	5	12	2	1	1	3	1	1	..	5	1	..	..	1	2	6
Horned Lark	562	..	..	..	..	..	..	..	355	102	..	8	..	..	..	5	1	..	34	13	29	..	..	..	15
Tree Swallow	51	4	..	..	7	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Jay	1587	25	33	30	79	122	140	8	37	107	93	29	47	64	54	70	163	6	159	164	28	39	10	7	73
Common Raven	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Common Crow	2341	22	74	7	39	109	160	3	128	93	29	45	58	19	74	53	8	15	49	173	61	135	67	400	519
Fish Crow	682	7	2	5	44	32	592	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Car. Chickadee	1224	17	31	6	25	40	28	5	5	236	42	10	23	10	94	61	18	25	2	169	30	10	19	14	304 **
Tufted Titmouse	608	13	30	..	13	17	18	6	7	61	14	3	10	11	59	19	23	15	25	84	9	48	16	6	101
White-br. Nuthatch	124	6	7	..	2	1	..	..	1	5	..	3	2	2	32	4	..	..	2	28	3	7	6	..	13
Red-br. Nuthatch	20	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	16
Brown-hd. Nuthatch	177	7	9	8	48	8	6	2	..	..	5	12	7	1	22	6	8	3	9	14	..	..	2	..	..
Brown Creeper	76	4	2	..	3	1	3	..	..	..	2	..	3	1	3	2	..	1	5	11	3	..	1	..	31
House Wren	24	1	3	..	1	12	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
Winter Wren	31	..	1	..	3	3	3	1	..	2	..	..	..	2	1	..	..	..	5	2	..	..	2	3	3
Carolina Wren	425	14	24	1	49	72	47	6	2	29	13	14	10	9	20	11	16	3	12	11	11	2	13	5	31
Long-bil. M. Wren	11	..	..	..	3	3	3	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	19	..	..	..	11	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	1199	26	39	60	77	42	158	10	65	90	46	15	31	93	65	76	33	6	57	109	44	2	21	4	30
Catbird	32	1	2	1	8	5	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brown Thrasher	288	13	12	8	28	50	79	7	3	5	8	16	2	..	13	6	5	..	18	4	8	..	2	..	1
Robin	4236	116	650	80	1022	296	691	475	11	275	72	205	6	9	22	10	3	27	7	5	..	10	8	16	220
Hermit Thrush	104	3	2	1	10	22	17	2	1	..	2	8	..	1	10	5	..	..	8	..	1	..	1	2	8
Eastern Bluebird	329	..	..	..	15	2	52	16	4	29	2	9	7	7	32	13	16	8	38	1	5	16	4	2	51
Bl.-gray Gnatcatcher	19	..	..	..	17	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Golden-cr. Kinglet	360	6	6	..	9	65	8	1	1	1	3	21	6	11	26	5	6	25	10	37	32	..	6	1	74
Ruby-cr. Kinglet	477	53	13	..	19	86	42	6	11	8	71	21	29	4	12	7	26	6	21	23	2	..	7	6	4
Water Pipit	521	..	..	..	138	4	201	..	..	15	52	64	..	..	..	..	20	..	1	1	15	..	6	..	4
Cedar Waxwing	1585	31	16	..	487	56	47	45	..	152	20	20	100	150	82	64	..	..	157	29	..	..	..	50	79
Northern Shrike	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
Log. Shrike	383	..	6	..	5	16	38	13	52	39	33	3	9	21	16	15	20	3	62	12	7	..	6	1	6
Starling	487,596	190	300	108	342	11	2005	120	7500	958	2300	12450	850	600	453	2336	3500	70	50,000	400,000	577	227	2030	250	419
White-eyed Vireo	4	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Solitary Vireo	9	..	..	..	3	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Bl.-and-wh. Warbler	6	1	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Orange-cr. Warbler	4	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Myrtle Warbler	1800	290	297	20	378	130	554	25	7	11	..	4	5	2	34	7	8	..	2	8	3	..	6	..	9
Yel.-th. Warbler	10	..	..	..	3	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pine Warbler	295	50	14	6	28	5	127	5	9	..	4	1	4	4	21	..	8	..	5	4	..	..	..	..	..
Prairie Warbler	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palm Warbler	44	..	3	..	16	3	14	..	..	..	..	..	..	4	2	..	..	..	1	..	..	..	1	..	..
Ovenbird	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellowthroat	28	1	1	..	15	6	3	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
House Sparrow	9190	275	97	318	274	6	1	50	525	424	4150	8	375	354	27	109	95	..	435	1043	263	244	22	16	79
East. Meadowlark	6885	171	137	152	363	154	744	151	249	225	2059	34	87	160	209	285	183	50	322	226	301	63	385	33	142
Redw. Blackbird	91424	1250	417	111	941	555	2577	350	565	21	5000	1545	1	3	..	45	41	..	75000	3000	1	..	..	1	..
Baltimore Oriole	52	1	6	..	..	..	..	..	12	17	..	..	1	..	9	..	..	..	..	6	..	..	..	..	..
Rusty Blackbird	11543	3	7	30	1	7	155	30	60	145	3000	71	..	..	..	..	..	..	5000	3000	25	..	..	1	8
Boat-tail. Grackle	1825	..	..	507	53	19	1246	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	335617	26	2	805	137	72	1004	..	..	..	250	77655	..	50	..	6	600	10	50,000	200,000	5000	..	..	..	..
Br.-hd. Cowbird	7948	52	..	..	28	7	1200	300	164	73	500	2010	..	10	20	..	3	..	500	3000	81	..	..	..	..
Cardinal	3805	34	93	36	130	150	296	76	30	370	512	28	46	85	182	270	74	30	88	638	200	156	87	65	129
Evening Grosbeak	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
Purple Finch	269	6	36	..	9	..	..	..	..	13	..	1	15	..	39	39	13	..	1	25	2	2	6	16	46
Pine Siskin	21	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Am. Goldfinch	1745	5	3	..	81	96	4	16	134	78	62	18	235	45	24	73	13	1	624	38	56	22	11	8	98
Red Crossbill	44	..	..	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
Ruf.-sided Towhee	1854	12	47	22	108	246	166	20	14	51	510	20	14	19	60	60	42	7	149	193	28	16	13	2	35
Ipswich Sparrow	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	625	4	20	..	174	67	98	14	81	..	17	7	..	17	1	18	..	..	91	14	1	..	..	..	1
Grasshopper Spar.	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
Sharp-tail. Sparrow	94	..	..	87	2	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Seaside Sparrow	88	..	..	..	28	44	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	202	..	..	4	5	6	103	16	2	..	42	6	..	..	..	..	..	..	18	..	..	..	..	..	..
Slate-col. Junco	11881	440	564	4	77	112	237	169	4000	469	15	1	525	145	451	713	179	28	105	1909	555	436	192	63	492
Chipping Sparrow	207	29	18	..	13	10	115	..	3	..	17	1	..	..	..	..	..	..	..	1	..	..	..	..	..
Field Sparrow	1961	55	30	..	59	18	82	3	95	62	1035	8	4	16	18	86	45	50	49	66	44	9	7	7	113
White-cr. Sparrow	42	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	7	..	11	19	..	..	3	..	..
White-thtd. Sparrow	6097	93	112	4	223	293	492	80	182	235	2172	141	194	91	227	193	105	24	258	361	68	7	248	55	134
Fox Sparrow	481	53	65	3	198	15	53	25	9	..	8	..	1	15	6	10	2	..	1	..	..	..	13	..	4
Swamp Sparrow	321	11	6	..	15	94	33	..	..	4	1	43	1	8	..	1	..	..	12	88	..	..	..	..	4
Song Sparrow	2298	31	72	3	31	98	153	13	7	31	917	20	12	18	65	71	71	5	126	314	49	30	58	22	81
No. of species	** 185	87	84	71	*** 144	136	134	56	58	58	66	69	58	65	64	50	56	31	68	73	56	32	52	39	** 59
No. of individuals	** *** 1309844	13661	4351	6424	*** 9008	8077	20300	2321	14578	5479	23747	94791	3120	2262	2925	4966	5606	445	183,861	615,297	7959	1556	4115	1283	** 3638

* See text for scaup species.
** Include some Black-capped Chickadees.
*** Include 20 unidentified scoters.

SPRING WARBLER MIGRATION STUDY BEING CONDUCTED IN THE RALEIGH, NORTH CAROLINA REGION

Ornithologists have spent much effort in describing the conditions under which birds establish their breeding territories and build their nests. This information is recorded for most of the native birds in the many current regional or life history books. For example, it is well known that the Cape May Warbler nests in the open coniferous forests of the northern United States and Canada, building its nest almost exclusively near the tops of conifers 30 to 60 feet tall. However, similar detailed information about the particular habitat relations of warblers while in migration is not available. Few sources mention what particular habitats the Cape May Warbler is most likely to be found in during the several weeks that it may take to reach its nesting region.

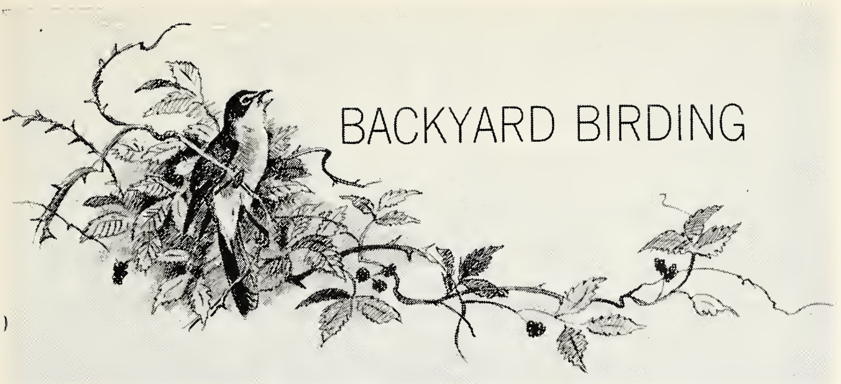
A new research program was begun at North Carolina State College during the spring of 1962 to gain further insight into some of the questions posed above. The spring migrant warblers have been chosen for emphasis in this study, which will be the doctorial research of the author.

The basic outline of this project follows. Field censuses will be initiated on a daily basis throughout the spring migratory season and into the nesting period of early summer. These daily analyses will be conducted along pre-selected transects through a series of habitats representing all of the major vegetation types of the Raleigh region. The desired information will be recorded on coded sheets designed to record a maximum amount of standard data on each individual bird in a minimum of time.

The resulting data will be analyzed to determine the microhabitat preferences of each species as it passes through the Raleigh area during migration. Comparisons will be made between the particular niches chosen during migration and those selected on the nesting grounds. Some observations on the local nesting warblers will be made during the current study, but, in general, this information will be developed from a comprehensive survey of the literature.

The information gathered in these censuses will also be arranged to provide relative abundance values for all species studied. These will be compared with earlier estimates made during the period 1880 to 1960 by the Brimleys and others working in the vicinity of Raleigh. Any observed changes in abundance will be analyzed and correlations with environmental changes sought.

In addition to the intense analysis of the local migratory populations, general information is needed from other points in the Carolinas. It is quite important that local observations be correlated with the general regional pattern of migration. For example, it will be very helpful to have advance knowledge of migratory waves approaching the Raleigh area. It is equally important to know of waves that pass to the east or west of Raleigh, and thus perhaps miss the study area. Information on the migrating waves of warblers as they move on to the north of the study area is also needed. Individual birdwatchers or groups of people who plan to spend considerable time in the field during the spring migration, or persons fortunate enough to be able to record regularly the passing waves of warblers from their wooded yards can be of considerable assistance to the successful completion of this study by reporting these migratory movements. If those who are interested will write to me at the Zoology Department of North Carolina State College at Raleigh, North Carolina, I will furnish further details on the particular information needed and the manner of reporting it. Your assistance will be sincerely appreciated and may make a significant contribution to this project and to the general body of knowledge on the spring warbler migration through the Carolinas. JAMES F. PARNELL, *Zoology Department, North Carolina State College, Raleigh, North Carolina, January 17, 1963.*



BACKYARD BIRDING

Connemara Farms
Flat Rock, N. C.
Nov. 10, 1962

Dear Mrs. Faver:

Last fall I became a C. B. C. member. Although I have been bird-watching since 1957, I was not able to go into field work until this year. Our farm is an excellent one for birds, with woods and meadows, two large ponds and several brooks. A large part is mountainous, extending up Glassy Mountain. Brush tangles, honeysuckle and greenbrier, wild blackberries and blueberries, pokeweed, ragweed, goldenrod, holly, barberry and various privets, are abundant. Here, the Chipping Sparrow substitutes for horse hair the softer hair of the Toggenburg goats we breed. Some birds prefer to weave in the cup of their nest a thin net of black hair from our Black Angus beef cattle.

The Brown-headed Cowbird may be seen here at Flat Rock any year from March on into July, following the cattle in the field for insects, or at the feeders near the house. In the daytime, they usually visit the feeders only a few at a time, but in the evening these birds take over the feeders in large numbers. At such times my exasperation is such that I seldom try to count them, but I remember at one time having as many as twenty, altogether. There were never many females at the feeder, but whether it is because there are fewer of them or because they are not bold enough, or whether they are out hunting up nests, I could not say. I have not seen any young cowbirds being fed by a duped foster mother, but this may be because I am not an experienced watcher and very poor at nest-finding in the summer. A flock of grackles visited us last summer and the cowbirds left a little earlier than usual. They seem to have the same kind of respect for the size of the grackle that a Blue Jay has for a woodpecker's bill. I did not greet the grackles with enthusiasm, as I understand that they are almost as bad as Blue Jays about nest-robbing, but it gave me some pleasure to see the cowbirds retreating.

I have been thinking about putting up a martin house or a pole with gourds for the Purple Martins, but I need some information. How near to the pond should the house or pole be situated? I want very much to attract these birds to our farm and am willing to provide housing for them, but perhaps they demand certain things about the house's situation that I don't know of, and if I make a try at this, I would like it to be done right.

Setting up bluebird houses on this place has in the past seemed unnecessary, for there are many old woodpecker holes in the trees, not to speak of those in our old-fashioned wooden fence and gate posts. We tried setting up one bluebird house on a tree near the barn, but it was ignored by all birds, including the House Sparrows! This fall I put it on a post in a sunny field where a pair of bluebirds successfully raised their brood last summer. I never could find their nest. But I often saw the bluebird family, the parents and four young ones, sitting on a power wire that runs over the field and pond. A family with five young birds was raised by another pair of bluebirds in the field where the does are pastured. This bluebird family would come up the hill and perch on the fence behind the barn or on the power line there. A third bluebird family was raised near a small pond, and there may have been others, but if so, they chose some very out-of the-way places. The larger family stayed with us until late October. Anyone who is interested in fall food for bluebirds should consider the virtues of pokeweed. I never knew them until this fall. We have several large patches of pokeweed and throughout September and October the birds were continually at them.

In spite of what I said about woodpecker and fence post holes here, I am inaugurating a "housing project for bluebirds." This is partly because I believe that houses provide more safety from their natural enemies and partly because the inhabitants are easier to observe. I do not know how many I will be able to put up, but several are in their places now and others are in the process of being made. Some, I shall make after the plan of the Carolina Bird Club's "Bluebird Special."

You would probably be interested in what is being done by the men of "Opportunity House," the Arts-Craft center in Hendersonville. Last winter, eighty men in the wood-working group made bird-feeders of every description, as well as bluebird and wren houses. They sold well, so more are being made this winter. I gave them the "Bluebird Special" plan sent me.

I must not close without telling you how much I have enjoyed *The Chat* since I joined CBC.

Very sincerely,
Margaret Sandburg
Nov. 26, 1962

Dear Mrs. Faver:

The latest news is that the Purple Finches have arrived. They don't yet come in flocks to the feeders—they are still paying more attention to the natural foods. It was on the fifth of November that the first one, a male, came to the feeder. Today we saw six there. It won't be long before the feeders will be covered with them. Recently on a walk through the pasture I discovered that the bluebird family is still with us. They were on the sunny side, following the fenceline as usual. There isn't any shortage of insect food here yet, for the weather isn't very cold, although we have had one or two cold spells. Also, we *don't spray!*

I have been reading *Silent Spring* with some fascination at the exposure of human idiocy, arrogance, and lack of perspective. Others have been preaching on this, such as W. G. Duncan of Kentucky, William Evjue of the *Capitol Times* in Madison, Wisconsin, and numerous biologists and scientists. Roger Tory Peterson put it well in his letter to *Life*, when he said, "The difference is, that people *read* Miss Carson." Rachel Carson is a powerful writer and the book is an arousing one. A review in *Organic Gardening* says: "It's as if a lid that kept down criticism and resentment against poison sprays had suddenly been blown off." This is how it appears to me also, for nearly everyone seems to have heard of the book. Columnists are now warning against the use of pesticides, and President Kennedy, after referring to the book, announced that a closer look will be taken at the long-range side effects of such products. Libraries have waiting lists for the book, and the publishers say they expect to sell 100,000 copies before Christmas, if sales continue as they have; meanwhile the Book-of-the-Month Club has printed 150,000 copies, and a soft-cover edition is being issued. Also the Readers' Digest is working on a condensation. This is all good; but *Life Magazine*, always the friend of "Big Companies," man-ages while praising her work, to stick the proverbial knife in her back. They cannot deny Miss Carson's horrifying assemblage of facts, so they call them "isolated cases." Yet they are examples of what is happening all over the country. Mrs. Hemingway tells of 3000 eagles dead in Texas from insecticides; Mr. Evjue writes of the decline of robins in Madison since the spraying of the Dutch elems; you write of the results of the soy bean fields at Eastover; I know of dead quail found by the side of the sprayed bean fields on the other side of Hendersonville.

So far, the Opportunity Group has been selling the bird feeders and houses only among themselves and people in Hendersonville or near by. If they could show their work to the CBC members at Tryon next spring, it would be an opportunity for both.

Sincerely,
Margaret Sandburg

A. R. Faver, Department Editor, Eastover, S. C., February 10, 1963.

NEWS AND COMMENTS

CBC Mid-winter Field Trip.—The weekend of January 11-13, 1963, marked another fine gathering of members and guests of the Carolina Bird Club (83 in attendance) at Lake Mattamuskeet, New Holland, North Carolina. They came from both Carolinas, Virginia, Tennessee, and Ontario, Canada. The Mattamuskeet National Wildlife Refuge covers 50,000 acres, and there are 43,000 more nearby at Swanquarter, both in the Atlantic Flyway area, so it was not unusual that Saturday night's totalling of identified species by Ed Marrow and Dan Knight reached 106. Four Bald Eagles were included, as well as great concentrations of Canada Geese, honking and calling both in the daytime and on moonlit nights, and Whistling Swans.

After Saturday's great day of birding in all directions of the compass, Margaret Y. Wall spoke on Audubon Camp scholarships and the necessity of members helping in recommending worthy applicants from the Carolinas. (Let's hear from you on this—applicants must be intervied.)

Harold Peters gave a splendid talk on the work of the Audubon Society, pinpointing the bald eagle research and survey that is being carried on at this time. Willie Gray Cahoon, Manager of Mattamuskeet gave a resumé of the refuge's history, growth and operation.

President Harry T. Davis announced that the spring field trip and short business meeting will be held in Tryon, North Carolina, the dates to be set in the near future. Hearty thanks go to Jack Osborne from all present.

KAY C. SISSON, *Secretary, C. B. C.*

Spring Count.—Members or groups in C. B. C. who take Spring Counts this year are urged to make the count between April 27 and May 6, a ten-day span, so that the counts might be more comparable. Please send a complete report of the count to the Editor, Dr. Johnston, as soon thereafter as possible. In this way the counts may be tabulated and summarized for *The Chat.*

List of Members.—In a future issue of *The Chat* we wish to publish an up-to-date list of C. B. C. members along with their current, complete addresses. If the address at which you are now receiving *The Chat* is in any way incomplete or incorrect, please send a change-of-address card immediately to the Distribution Office, N. C. State Museum, Box 2281, Raleigh, N. C.

Erratum.—In the 1962 Spring Count tabulation reported in the September issue (*Chat,* 26:66), there was a report of a Red-cockaded Woodpecker at New London, Stanly Co., N. C. John Trott informs us that this record was an error and should be omitted from the locality's report.

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

In recent years this Department has received an increasing number of reports of birds that have remained in our area well beyond the limit of their normal stay. Most of them are summer residents that have failed to go south with the approach of winter. Usually, they appear to be in good health. But are they? Perhaps these are the birds that found just enough poisoned food to disarrange their faculties. Unwittingly, we may have been responsible for providing the portion.

With such a possibility in mind, we would do well to learn what we can about the hazards (and benefits) to animal and plant life around us, and a good layman's approach to this knowledge will be found in the currently popular, study, *Silent Spring* by Rachel Carson—tempered, perhaps, by the words of LaMont Cole, who reviewed it ably in the December, 1962 issue of *Scientific American.*

Gallinule and Coot Observations.—About 11 miles north of Southern Pines, Moore County, North Carolina, lies squatty, flask-shaped Thurlow's Lake, covering twenty or more acres. The neck of the lake abounds in small clumps of reeds, rushes, other water-plants, and cattails, gradually ending in a small swamp containing black gum, willow, and maple trees. On this lake, from the fall of 1961 through April 14, 1962, I have observed a number of American Coots, a Common Gallinule, and flocks of scaup, Ring-necked Ducks, widgeons. Along its sandy shores I have seen Killdeer, Lesser Yellowlegs, and, at one time, a Stilt Sandpiper.

After March 25, I found the coot count had dwindled to two on Thurlow's Lake but the gallinule had remained, apparently alone. On April 10, I saw the two coots with their heads together. Setting up my scope for better observations, I noticed that one bird would half wrap or lay its head over the neck of the other. They did this a number of times, interrupted only by a swim to a clump of reeds where they would stand and preen themselves. While observing this prenuptial performance of the coots, I saw the gallinule coming off a clump of reeds, about two feet above the water. For days the possibility of the gallinule as well as the coot nesting here was uppermost in my thoughts but by mid-April they were gone. However, on April 23, a Common Gallinule was brought to me. It had been found dead under power wires about 2½ miles northeast of Southern Pines, and about 10 air miles from Thurlow's Lake. It was such a beautiful specimen, that I wanted not only to preserve it but also to know more about it, so I put it in the refrigerator. Later, I contacted Mr. Harry Davis, Director of the N. C. State Museum. He was interested in seeing the specimen and I sent it to him. He wrote that the only injuries found were on the head and neck, caused no doubt by coming in contact with the power line. But the most interesting note was that the gallinule was a female, containing "a string of undeveloped, small, potential eggs."

It is all conjecture, but could this have been the same gallinule I saw on April 10, coming off that clump of reeds? If so, it had moved toward the coast where it is known to breed sparingly. As I write this account in mid-November, coots are back at Thurlow's Lake but so far I have not seen a gallinule.—MARY KELLER WINTYEN, *280 W. New Hampshire Ave., Southern Pines, North Carolina, November 18, 1962.*

Dunlin Collected in Wake County, North Carolina. On October 13, 1962, the authors sighted a flock of four medium-sized sandpipers flying over a newly sown grain field near Lake Wheeler, a city reservoir about ten miles south of the Raleigh, North Carolina city limits. A single individual was collected which proved to be an adult male Dunlin *(Erolia alpina)* in fall plumage.

A check through the 1959 revision of *Birds of North Carolina* and *The Chat* shows, only in the former, a single inland record of this species: a sight record near Hendersonville on August 25, 1953. The current observation appears to represent a second inland record for North Carolina and a new record for Wake County. The specimen collected was donated to the North Carolina State Museum of Natural History. JAMES F. PARNELL, *Zoology Department North Carolina State College, Raleigh, North Carolina, and* JOHN P. HARDISTER, *Lake Junaluska, North Carolina, January 17, 1963*

Wilson's Phalarope at Bodie Island, North Carolina.—Two Wilson's Phalaropes *(Steganopus tricolor)* were observed as they were preening on the edge of the pond by the Bodie Island Lighthouse on September 15, 1962, by W. A. Cooper, J. F. Parker, and the writer. We did not see the birds feeding in the typical phalarope manner. The black needle-like bill and the small head and slim neck, in proportion to the body, were carefully noted. Upon close approach the birds flew. In flight the white rump and unmarked wings were noted. *The Birds, Mammals, Reptiles, and Amphibians of Cape Hatteras National Seashore Recreation Area,* (a project completion report to the National Park Service by T. L. Quay, 1959) lists the Wilson's Phalarope as an accidental visitant to the area.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk 9, Virginia, November 22, 1962.*

Bridled Terns off the North Carolina Coast.—On September 13, 1962, I observed the following species from a chartered fishing boat, while cruising off the North Carolina coast just inside the Gulf Stream 22 to 25 miles east of Hatteras Inlet *(i. e.,* in the general vicinity of the Diamond lightship): Cory's Shearwater, 350; Greater Shearwater, 25; Audubon's Shearwater, 10; Wilson's Petrel, 20; Northern Phalarope, 30; Parasitic Jaeger, 1; and Bridled Tern, 40. Also, three Sparrow Hawks, a single Bobolink and large numbers of Common Terns and Black Terns were seen.

In this list, the Bridled Terns (*Sterna anaethetus*) are especially noteworthy. They were seen at close range and their identity was beyond question. A single flock of some 25 birds circled about the boat for five minutes or so, 20 to 50 feet over the water, then flew off out of sight. Several times over the span of an hour a similar flock repeated this performance; I assume they were the same birds each time. Approximately

15 other individuals were seen (groups of from 2 to 5 birds), plus one perched alone on driftwood.

The general gray tone of the mantle of these birds was like that of the Black Terns; *i.e.*, the gross appearance was dissimilar to the black-mantled Sooty Tern. The long, streaming tail feathers were very evident. The flight appeared quite graceful and buoyant. The long, slender bill and the pale hind-neck were easily observed and the facial pattern was seen clearly. I was able to see a narrow white edge in the outer tail feathers twice, when birds momentarily fanned out the tail. Several times, when the Bridled Terns were following the boat, close overhead, I heard them give a very musical monosyllabic call. (Murphy and other authors say only that the voice of the Bridled Tern is very different from that of the Sooty Tern).

The Bridled Tern is not mentioned in *Birds of North Carolina* (Rev., ed., 1959). Nor is mention made of it in *The Birds, Mammals and Reptiles of Cape Hatteras National Seashore Recreational Area,* prepared for the U. S. Department of the Interior by T. L. Quay, (1959). The 1957 A. O. U. Check-list states merely that the species ranges north to South Carolina in the nonbreeding season. Notwithstanding the apparent absence of records for North Carolina, it seems incredible to me that, on a single trip, I should be able to find Bridled Terms off the Outer Banks if the species is not, in fact, of regular occurrence there.

The presence of these birds is not readily explained on the basis of weather. It was warm, clear and calm in the Cape Hatteras region on September 13 and during the period immediately preceding. The only tropical hurricane of the season to reach that latitude passed well offshore several weeks previously.—ROBERT H. GRANT, *19 Maida Road, Metuchen, N. J., November 16, 1962.*

Worm-eating Warbler Breeding in Wilkes County, North Carolina.—On July 1, 1962, I was shown the nest of a Worm-eating Warbler *(Helmitheros vermivorus)*. It was located on a bank on the edge of a trail through rich woods, just off the Blue Ridge Parkway in Wilkes County, North Carolina. It contained three very recently hatched warblers and one Brown-headed Cowbird, which I judged to weigh about four times as much as one of the infant warblers. The nest was not particularly well concealed and was quite pretty with a frond of Christmas Fern draped along either side of the structure. Two adult warblers were in attendance.—JAY SHULER, *43 Kirkwood Lane, Greenville, South Carolina, November 19, 1962.*

Brewster's Warbler in Wilkes County, North Carolina.—On August 28, 1962, a Brewster's Warbler was seen on a bank of Reddies' River in Wilkes County, North Carolina. It was a surprise observation for I was not looking very purposefully at some shrubbery on the river bank when I saw a movement and a moment later the bird slipped up through the branches and came into full view. A few miuntes, later a male Blue-winged Warbler appeared nearby. This is my first record of the Brewster's Warbler in nine years of observation in Wilkes County. Blue-winged Warblers are seen here in migration but only one or two individuals in a season. The Golden-winged Warbler is rarely seen in migration.—WENDELL P. SMITH, *911 E Street, North Wilkesboro, North Carolina, December 20, 1962.*

Evening Grosbeak on the Upper North Carolina Coast in Mid-September.—On September 26, 1962, in the course of conversation with Gill Alridge, Assistant Manager of the Mackay Island National Wildlife Refuge, he told me that he had seen an Evening Grosbeak *(Hesperiphona vespertina)* near the observation tower on the causeway crossing the Great Marsh to Knotts Island, Currituck County, North Carolina. Alridge could not recall the exact date he saw the bird; only that he observed it about the middle of September, 1962. The tower is located on a slight rise of high ground along the causeway on the site of an old gun club. On the border of this high ground there is a thicket of privet, wax-myrtle, some Carolina willow, and Japanese honeysuckle. The remainder of the small area is overgrown with grasses. This site is within the Mackay Island Refuge.

This observation is possibly connected with another September report from the same general area. On September 22, 1962, W. F. Rountrey saw an Evening Grosbeak just across the state line in Princess Anne County, Virginia. Rountrey's observation was made 2½ to 3 miles NW of the place where Alridge found his bird. They may have seen the same individual.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk 9, Virginia, November 22, 1962.*

Tower Casualties at Aiken, South Carolina.—On the night of September 6-7, 1962, 400 birds of 32 species collided with the WJBF television tower (1292 ft.) seven miles south of Aiken, South Carolina. A cold front passed through the area the night of September 5. On the night of September 6-7, the ceiling lowered to 1600 ft. at 1 AM, and during the night the wind was NE 4-11 mph with a low temperature of 69°.

Species, in order of abundance were: Red-eyed Vireo, 239; Ovenbird, 30; Veery, 22; Bobolink, 20; Black-and-white Warbler, 19; Northern Waterthrush, 11; Kentucky Warbler, 11; American Redstart, 9; Yellow-breasted Chat, 5; Canada Warbler 4; Cerulean Warbler, 3; Hooded Warbler, 3; White-eyed Vireo, 2; Prothonotary Warbler, 2; Baltimore Oriole, 2; one individual each of: Sora, Common Nighthawk, Eastern Kingbird, Great Crested Flycatcher, *Empidonax* sp., Yellow-throated Vireo, Worm-eating Warbler, Golden-winged Warbler, Blue-winged Warbler, Parula Warbler, Yellow Warbler, Yellow-throated Warbler, Chestnut-sided Warbler, Prairie Warbler, Louisiana Waterthrush, Yellowthroat, and an unidentified warbler. All were in a fat condition, especially the Red-eyed Vireos and the Icterids.

Most of the birds fell in the southwest sector of the tower area, from 10 to 70 yards from the base. Numbers of birds were still alive. Of 36 live Red-eyed Vireos, nine flew off when approached. These were hiding in the thick weed growth and were probably only stunned.—WILLIAM POST, JR., *1930 Boulevard, Athens, Georgia, November 7, 1962. (Editor's Note:* the above article was received too late for inclusion in Dr. Adam's compilation appearing in *The Chat*, **26**:83-88, 1962. The above records do not differ greatly from those found at other localities on this night.)

BOOK REVIEWS

The Life of Birds. Joe Carl Welty. W. B. Saunders Company. Philadelphia, Pa., 1962. 546 pp. $9.00.

First impressions on casual perusal of this volume are good. My review copy is substantially bound in light olive cloth, with an engaging cover design of chickadees on a branch that curves around the title lettering. Its convenient size, good grade of paper, clear type, and sharply reproduced illustrations all enhance the attractiveness of the book. Endpaper maps in blue and white show global zoogeographic regions with comparison of bird distribution in each. Chapter headings are accompanied by drawings and apt literary quotations.

Closer scrutiny bears out the favorable first glance. I am impressed by the author's approach as stated in the Preface. He says, first, "The chief aim of this book is to present, simply and straightforwardly, the basic facts of bird biology." Then he states candidly that ornithologists have held a low place in the scientific hierarchy, before adding, "It is, however, a paradoxical fact that many of the most fundamental principles and theories in modern biology have been discovered by ornithologists through researches on birds." This point of view is amply vindicated by his text. He reviews current ornithological investigations in considerable depth, but with discrimination. In spite of the welter of detailed information, he usually succeeds in relating his information to the larger background of general biological knowledge. His style is easy and at times even sprightly and humorous.

The rather disconnected chapter arrangement may be disturbing to some. The subject of "photoperiodism" is considered along with excretion and reproduction in a single chapter, whereas "Migration and Orientation" constitute another chapter much later in the book. Again, widely separated chapters are entitled "Birds as Flying Machines" and "Flight," with additional descriptions of feathers and flight muscles in those chapters dealing with the integumentary and musculo-skeletal systems. Classification of birds is given in the second chapter, but "Origin and Evolution of Birds" is last in the book. Actually, the author has divided his material well and there is little overlap. The chapters are short and don't need to be read consecutively, anyway, unless one is altogether obsessive in his study habits!

This book is written by an obviously experienced and dedicated professor crimination. In spite of the welter of detailed information, he usually to any serious bird-watcher who wants to read beyond the level of the field guides and the big pictorial volumes.—Thomas W. Simpson

BRIEFS FOR THE FILES

Common Loon, 2 in breeding plumage at Roanoke Island, N. C., August 25, R. H. Peake, Jr., Paul W. Sykes, Jr.; 1, changing plumage, deep inland at Lake Davidson, Iredell County, N. C., November 3, the J. H. Lovells. • **Brown Pelican**, 9, August 5; 11, September 15, at Oregon Inlet, N. C., Paul W. Sykes, Jr. • **Cattle Egret**, 114 among Angus cattle on a farm in Martin County, N. C., August 27, Leon Wynn, Jr., *fide* R. L. Wolff. • **Snowy Egret**, 350 counted in Bodie and Pea Island area, N. C., September 15, Paul W. Sykes and party. • **White Ibis**, 1 immature killed from a small flock by a hunter in Calhoun County, S. C., November 21, Mrs. Ellison D. Smith, • **Green-winged Teal**, 4 in Pea Island area, N. C., September 15, Paul W. Sykes, Jr. • **Shoveler**, 6 in Pea Island area, August 25 (an extremely early date), R. H. Peake, Jr. and Paul W. Sykes, Jr. • **Peregrine Falcon**, 1 following a flock of Starlings near Charlotte, N. C., September 30, Lee Jones. • **Black Rail**, 1 flushed from causeway to Great Marsh, Knotts Island, Currituck County, N. C., September 22, W. F. Rountrey. • **Golden Plover**, 1 in breeding plumage at Bodie Island, N. C., September 15, W. A. Cooper, J. F. Parker, Paul W. Sykes Jr. • **Marbled Godwit**, 27 feeding together at Bodie Island Lighthouse, N. C., September 15, Paul W. Sykes, Jr., *et al.* • **Hudsonian Godwit**, 1 carefully observed at Bodie Island, N. C., September 15, W. F. Rountrey. • **American Avocet**, abundant in the Oregon Inlet area, N. C., this fall:

28 on August 25, and 41 (37 in one group) on September 15, Paul W. Sykes, Jr. and party. • **Black Skimmer**, 700 est. August 25 and 600 on September 15 at Oregon Inlet, Paul W. Sykes, Jr. • **Yellow-billed Cuckoo**, 1 found dead, fresh, at Elkin, N. C., October 24 (a very late date), Linville Hendren. • **Common Nighthawk**, normal heavy flights were not reported this fall; at Charlotte, N. C., a few single birds were seen on September 9, Lee Jones; at North Wilkesboro, 2 were seen on September 19, Wendell P. Smith; in Anderson County, S. C., a late migration ended October 9, Mrs. R. C. Tedards. • **Chimney Swift**, numbers were still present in Anderson County, October 15, Mrs. R. C. Tedards. • **Ruby-throated Hummingbird**, 1 at Charlotte, N. C., October 8, Mrs. E. O. Clarkson; 1 remained at a feeder near Charleston, S. C. as late as November 11, Mrs. C. D. Miller. • **Red-cockaded Woodpecker**, 1 at Carolina Sandhills Wildlife Refuge in Chesterfield County, S. C., November 17 (a slight extension to the northwest of the published range), Dr. William Cobey and Lee Jones. • **Western Kingbird**, 8 recorded in 4 separate areas around Wilmington, N. C., between October 27 and November 17, Mrs. Katherine Alexander, Mrs. Sam Earle, Mrs. Polly Mebane, and Mrs. Mary Urich; 1 was found at the Fort Macon State Park at Morehead City, N. C., October 24, Mrs. Fred Conderman and Ralph Browning; 1 was watched at Folly Beach, S. C., November 8, Edmund Blitch, III. • **Rough-winged Swallow**, 3 at North Wilkesboro, N. C., August 2, Wendell P. Smith; 1 or more appeared at Charlotte, N. C., September 6, Lee Jones. • **Red-breasted Nuthatch**, 2 seen and several heard at the refuge in Chesterfield County, S. C., October 20, the J. R. Norwoods. • **Short-billed Marsh Wren**, 1 near Charlotte, N. C., September, 22, not previously reported from that area, Lee Jones. • **Mockingbird**, 2 at Wayah Crest (5000 ft. el.), Macon County, N. C., October 6, the Robert Overings. • **Catbird**, 1 rested an hour or more on a deep-sea fishing boat 40 miles SE of Murrell's Inlet, S. C., was watered and fed, and left for shore, September 29, Manning Smith; 1 was seen near Anderson, S. C., December, 1, Mrs. R. C. Tedards; 1 at a feeder at Elkin, N. C., for weeks, was present when reported on December 3, Linville Hendren. • **Wood Thrush**, 1 remained at Elkin until December 9, Linville Hendren; 1 was watched at length at a feeder at Durham, N. C., December 30, Oliver W. Ferguson. • **Eastern Bluebird**, appeared at several locations to be more numerous than in recent years: 55 were counted during a 30-mile-drive in northwestern South Carolina on September 27, Mrs. R. C. Tedards; 10 were found in a yard in Hickory, N. C., in mid-October, J. Weston Clinard; Wendell Smith noted an increase this fall at North Wilkesboro, N. C., • **Cedar Waxwing**, 2 at Pea Island, N. C., August 25 (an early date), R. H. Peake, Jr. and Paul W. Sykes, Jr. • **Philadelphia Vireo**, 1, studied carefully in low vegetation at Pea Island, N. C., September 15, Paul W. Sykes and party; several observed at length near Anderson, S. C., October 10 through October 16, Mrs. R. C. Tedards. • **Nashville Warbler**, 1 at Pea Island, close up, September 15, Paul W. Sykes and party. • **Wilson's Warbler**, 1 noted at North Wilkesboro, N. C., September 17, Wendell P. Smith. • **Baltimore Oriole**, a female or young male at a Charlotte, N. C., feeder, August 30 and again on September 9, the J. R. Norwoods; 1 female at a feeder in Durham, N. C., December 11, still present when reported on January 4, 1963, Oliver W. Ferguson; 1 at North Wilkesboro, N. C., September 17, Wendell P. Smith. • **Brewer's Blackbird**, 1 at Charlotte, N. C., city garden, October 19, Mrs. E. O. Clarkson. • **Western Tanager**, 1 female observed at close range near feeder in yard at Elkin, N. C., October 8 and 10, Earl M. Hodel. • **Painted Bunting**, a male in good plumage has remained all fall at a Summerville, S. C., feeder and was present when reported on January 8, 1963, Mrs. Jack Button. •**Dickcissel**, 2, near Charlotte, N. C., September 29, Lee Jones. • **Lark Sparrow**, 1 adult in non-breeding plumage at Bodie Island, N. C., August 25, R. H. Peake, Jr. and Paul W. Sykes, Jr.; 1 at the same location on September 15, W. F. Rountrey.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1962 unless otherwise shown.*

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

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Editor: David W. Johnston, Department of Biology, Wake Forest College Winston-Salem, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Rt. 1, Box 48, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Boat-tailed Grackle, photographed in Florida by Samuel A. Grimes. This was a brown-eyed bird.

ERECTING WOOD DUCK BOXES

By F. Eugene Hester

In the past 20 years many articles have been written to promote the erection of nest boxes for the Wood Duck (*Aix sponsa*). Details on construction of the box are generally available, but much background information which led to the box design is missing. Also lacking is information about where and how the box should be erected. This article will answer questions frequently posed by those who attempt to provide suitable nest sites for wood ducks. The information presented herein is based upon the extensive literature available on nesting of wood ducks and upon a personal nine-year study of nest boxes on six areas in Wake County, North Carolina.

Box Construction

The nest box most commonly recommended is of rough cypress lumber and has outside dimensions of 12 x 12 x 24 inches deep with a round 4-inch opening or an eliptical one, 3 inches high and 4 inches wide. Inside base dimensions are 10 inches square which is the approximate size of natural cavities used by these birds. About 3 inches of coarse sawdust or shavings is recommended to provide nesting material for the duck.

Cypress lumber is recommended because of its durability. We have some boxes which have been up nine years and are still in very good condition. It is probable that the average cypress box may last 15 years with minor maintenance and protection from vandalism. In addition to its durability, rough cypress is inexpensive and the average cost for lumber for a box would be about one dollar. Rough cypress is recommended because the duckling must climb from the nest to the box entrance when only one day old. Ducklings which are unable to climb this distance die in the box.

The eliptical 3 x 4-inch hole has been found to be large enough to admit most female wood ducks. but to exclude the large raccoons (over 10 pounds) found in Northern states. Raccoons are generally the major predator of wood duck nests. Raccoons smaller than 10 pounds apparently have no trouble entering eliptical openings of this size, and because most raccoons in the South are relatively small, it is probable that raccoons can enter either type of entrance without difficulty. The depth of the box was also a reflection of the importance of the raccoon as a predator, because it was designed to be too deep for the raccoon to reach the eggs when he could not enter.

Sawdust is added to the boxes since the wood duck forms her nest from debris found in the cavities, and never carries nesting material to the cavity. Her own down feathers are added to the nest a few days before incubation begins.

Box Erection

Probably the greatest single factor influencing box usage by wood ducks is the choice of a suitable area for erecting the box. Many times individuals erect boxes in an area in hopes of attracting ducks from other areas. Although this may be satisfactory at times, boxes are generally used more readily if they are erected in areas already used by these ducks. Boxes erected on poles over water have less damage from predation and competition.

The height of the box above the ground or water seems to be relatively unimportant as long as it is high enough to eliminate danger from either flooding or human molestation. In several areas of relatively stable water level and low danger of human molestation, boxes erected only a few feet above the water have been used readily. Probably the maximum nesting

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height would be very high since natural nesting cavities have been found as high as 60 feet above the ground.

Nesting Density

The maximum nesting density of the wood duck may reach several birds per acre after many years of intensive management. When beginning a nest box program it is well to start with a small number of boxes placed in several locations. More boxes can subsequently be added in the areas of greatest utilization. Banding studies have shown that young females tend to return to nest in the area in which they hatched. Also adult females tend to renest in sites in which they previously were successful. These two behaviorial characteristics are important factors which facilitate the expansion of a breeding colony.

Note of Caution

Seldom is there anything which is all good and no bad. So it is with wood duck nest boxes. In some studies it has been found that after wood ducks have accepted these artificial nest sites, raccoons have examined the boxes and found them to contain an easy meal of eggs, young ducks, or even the adult female herself. In areas where the boxes are not managed, predation may increase until each box is systematically checked by one or more raccoons.

When boxes are raided in this manner, there is real doubt as to the value of the nest-box program. Since raccoon-proof guards are very difficult and expensive to build, the only solution seems to be a frequent evaluation of nesting success with appropriate action to remove predators which habitually raid the boxes.

The rapid acceptance of boxes in some areas seems to indicate a lack of suitable natural sites. Boxes properly erected and checked through the season can be a real pleasure to the conservationist and a big help to the wood ducks.

Further details for building and placing wood duck boxes may be found in "Adventures with Wood Ducks," obtainable from The North Carolina Wildlife Resources Commission (Box 2919, Raleigh, N. C.).

Zoology Department,
North Carolina State College,
Raleigh, North Carolina.
February 9, 1963.

SEXUAL DIFFERENCE IN THE MIGRATION OF THE BOAT-TAILED GRACKLE

By Ivan R. Tomkins

Migration may be a variant thing within the species. The age groups, and the sexes, often display differences in timing, choice of wintering grounds, and in flocking associations. Some part of a bird population may be nonmigratory. Another part may migrate farther when young than when older. In summer non-breeders may remain on the wintering grounds, or at nearly any place in the orbit, which itself may be stable or quite variant. Recognition of these specific variations is often, even usually, difficult, but it is easier to see them where there is marked sexual dimorphism, or where the subadult birds pass through recognizable plumage changes.

In this brief account some differences in the migration of the sexes of the Boat-tailed Grackle will be discussed, based on field experience in South Carolina and Georgia. The race inhabiting this region is *Cassidix mexicanus torreyi* which, according to the current edition (1957) of the Check-list of the American Ornithologists' Union, breeds along the Atlantic coast from New Jersey to Georgia. This is the most northern subspecies of *Cassidix*, and there is no reason to believe that any of the more southern subspecies range within this region. *C.m. torreyi* is quite easily separated from the next subspecies to the south, because all adults, male and female, have yellow irides, while the boat-tails of central Florida are said by many ornithologists to be consistently brown-eyed. There appears to be a gap between the two subspecies.

For several years I have known that the females are grouped separately from the males outside the nesting season, and that they are largely missing from the Savannah, Georgia area from mid-summer to late March. To be sure of this, specimens were collected to determine size, plumage, and eye color, in the different age groups, and then a full yearly cycle of observations was used to test the earlier conclusions. The particular area was along the palmetto-lined U. S. Highway 80, from Thunderbolt toward Tybee Island.

This is not original with me. Arthur T. Wayne (*Birds of South Carolina*, Charleston, 1910, p. 112) wrote: "The Boat-tailed Grackle is at all times gregarious, but the sexes do not mingle until late in February or the beginning of March, in fact, the females are seldom seen in the winter."

In the field determination of the sexes, it was found that the adult males were large, glossy, and with yellow irides; the first-winter males as large as the adults, but brownish like the females, and with dark eyes; and the females smaller, brownish, but with yellow eyes. In the young males the eye color does not begin to change until they are a year old, when they begin to molt into the glossy adult male plumage. These subadult males gather in flocks with the adult males, and engage in the "head-up" display which is purely male behavior (Selander and Giller, *Condor*, 63: 59-61, 1961).

In 1962 and 1963, the females arrived in late March as usual, and were soon engaged with nesting activities. They left by mid-July (1962) and only a few were found after that, nor did I find any in McIntosh and Glynn counties. By mid-March, 1963, the adult males began to break up the flocks and spread out along the palmettos, in twos or threes, or singly, some time before arrival of the females.

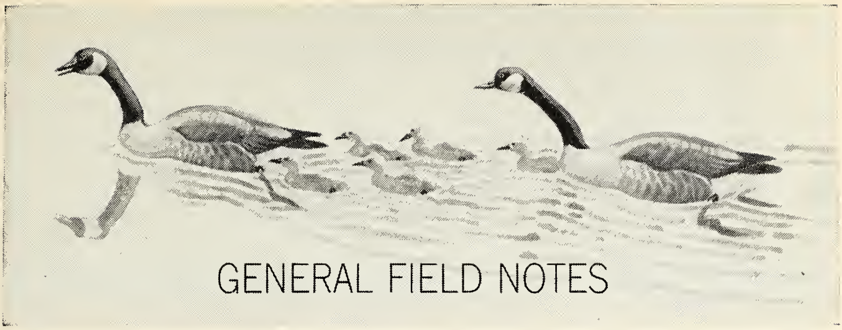
Mr. Samuel A. Grimes has reviewed his notes, and his comments in a letter dated February 6, 1963 deserve to be quoted, although they are of much wider importance on the relationships of the grackles of the genus *Cassidix* than the immediate application.

> "When I came back to Jacksonville in December, 1929, and began to cover the area quite thoroughly shortly thereafter there were no boat-tails breeding in the salt or brackish marshes of Duval County. Flocks of them wintered in and around the salt marshes, the males always white-eyed and the females outnumbering males at least 10 to 1 and probably 50 to 1. I shot several of both sexes.
>
> "During the same period, and up until the mid-thirties boat-tails with males brown-eyed nested up the east coast, mainly in buttonbush ponds, through St. Johns County and as far as a cattail marsh at Jacksonville Beach. That was their extreme point of penetration up the east coast. I do not know whether the brown-eyed bird breeds or ever bred farther north up the interior of the state beyond the Gainesville area. About 1936, for no apparent reason, the brown-eyed boat-tails disappeared from Jacksonville Beach and have not nested there since, or even occurred there so far as I know.
>
> "The white-eyed boat-tail was at the same time nesting in the salt marshes near Fernandina, but no farther south than a point about five miles north of the Nassau River. It was only after the bridge was built and fishing camps established that the boat-tail took up permanent residence at the mouth of Sawpit Creek in the early 'Forties."

That Grimes found many more females than males in winter supports the conclusion arrived at before receiving his letter, and indicates that the females are concentrated in winter in the southern part of the breeding range and possibly beyond. All these data lead to one conclusion—that of a male population remaining all year, with the females moving south after the nesting season. Is this true throughout the range from Georgia to New Jersey? And do the males of the northern part of the range have a partial migration, swelling the numbers in the mid-range? The answers to these questions will probably come from the coastal birders of the Carolinas and Virginia, but it will take time and careful observations.

1231 East 50th St.,
Savannah, Georgia.

April 24, 1963.



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Marbled Godwits at Bodie Island, North Carolina in Mid-winter.—While on the ferry going over to Pea Island on January 27, 1963, Bob Thomas, Dan and Norma Knight, and I saw six Marbled Godwits **(Limosa fedoa)** resting on a low sandbar near Bodie Island, Dare County. North Carolina. These birds were quite a distance from the ferry but we were able to identify them because of their extremely large size, the brownish cinnamon color of their backs, and their long upcurved bills. We also noted that they held their bills horizontally. When we returned from Pea Island later in the day these birds had moved off of the sandbar and were feeding with Black-bellied Plovers and Dunlins. They were almost as large as the Long-billed Curlew Harry Davis and I saw at Ocracoke several years ago. We could clearly see them and we watched them probing for food. They definitely did not have white in the upper tail area that marks the Hudsonian Godwit.—JOHN THOMPSON, *Rocky Mount, North Carolina, January 28, 1963.* (The Marbled Godwit appears to be making a fairly good comeback along the coast of both of the Carolinas. This record is of particular interest in that the observation was made late in January. The species is normally listed as a migrant here.—*Dept. Ed.*).

Long-eared Owl in Hyde County, North Carolina.—On March 16, 1963, we found a Long-eared Owl (*Asio otus*) dead at the side of U. S. Highway 264, 8 miles north of Engelhard, Hyde County, North Carolina. The owl, an adult female, was in excellent condition, apparently having been killed the previous night. Examination failed to reveal the cause of death. The night before was clear and the temperature was in the high 30's. The specimen has been deposited in the collection of North Carolina State College as #615A.

Examination of the stomach contents revealed two southeastern shrews (*Sorex longirostris*). The shrews were undigested, apparently having been taken shortly before death.

Birds of North Carolina (Pearson, Brimley, and Brimley, 1959) records only 13 records for North Carolina of this rather secretive owl. All previous records were from the piedmont and mountain areas of the state except one specimen taken in Pitt County, in the upper coastal plain, in December, 1939. Thus, the specimen reported here constitutes the first lower coastal plain record. The date of collection, March 16, represents the latest spring record in the state, February 24 being the previous late date.—JOHN R.

PAUL and CARROLL L. CORDES. *Department of Zoology, North Carolina State College, Raleigh, North Carolina, April 3, 1963.*

Chimney Swift Banding Return.—On September 12, 1962, I banded a a Chimney Swift (*Chaetura pelagica*) at my home near Anderson, South Carolina, with U. S. Fish and Wildlife Service band No. 68-17202. This bird was banded after having come into our kitchen from the chimney.

At about 7:00 AM on May 7, 1963, upon rising, I noticed two Chimney Swifts in my den, presumably having come into the house through the same chimney used by last year's bird. I caught one of these birds, banded, and released it. Upon catching the second one, I found that it already carried a band: my band No. 68-17202 from the previous fall.

It is interesting that this swift not only returned to the same chimney it used last year but it returned to the same room where it had been captured and banded.—R. CONNOR TEDARDS, *Route 2, Brown Road, Anderson, South Carolina, May 7, 1963.*

Western Kingbirds Near Southport, North Carolina.—Two Western Kingbirds (*Tyrannus verticalis*) were seen at Long Beach, North Carolina on November 17 and 18, 1962. They perched in wax myrtle bushes beside Davis Creek, occasionally darting out for insects in typical flycatcher fashion. The two birds stayed together constantly. On the second day the wind was quite strong and they hovered, with dark tails spread, over the weeds, possibly hunting for insects sheltering there from the wind. When spread, the tails looked decidedly notched. I could not see the white along the sides of the tails and I assume the birds were immatures. MRS. ROBERT E. MCCOY, *2014 Hamilton Road, Greensboro, North Carolina, May 13, 1963.*

A Vermilion Flycatcher in Central South Carolina in April.—While observing birds alone in the swamp along Colonel's Creek at the eastern edge of Columbia, South Carolina, on Sunday afternoon, April 14, 1963, I found a brilliant male Vermilion Flycatcher (*Pyrocephalus rubinus*) and watched it for about 20 minutes with and without binoculars. There was no possibility of confusing it with a Cardinal or one of our tanagers. Its size and manner of perching are entirely different from those birds. This bird sits upright. I watched it well from all angles. The bird was flame red with a black line from the bill through the eye joining the black at the back of the head. The top of the head was "puffed up" into a topknot. When perched it was quite still. It worked about half-way up in the oaks, gums, and willows and finally got out of sight in the deeper woods. The weather was fair with a few clouds and the temperature in the cool high 60's. Against the spring green growth it was an eye-catcher. It captured two insects on the wing—or acted as if it did.

I find from my old copies of the *Chat* that the Vermilion Flycatcher has been found several times in lower South Carolina. I do not know of any previous occurrence in the Columbia area.—MRS. B. W. KENDALL, *21 Cedarwood Lane, Columbia, South Carolina, April 15, 1963.*—(This appears to be the fifth occurrence of the Vermilion Flycatcher in South Carolina and the first occurrence here during the month of April. *Chat* references are, 20:19, 1956; 23:37, 1959; and 26:20, 1962. The first recorded bird, a male, was taken for the Charleston Museum.—*Dept. Ed.*).

American Woodcock Breeding in Piedmont South Carolina.—On April 14, 1963, William C. Grimm and I flushed an American Woodcock (*Philohela minor*) in a wooded area along a small stream near Marietta, Greenville County, South Carolina. Since the bird did not fly far and fluttered on the ground as if unable to fly farther, we suspected that it was nesting. In a short time we found a young bird in the leaves where the adult had flushed. It proved to be able to fly short distances, though patches of down still clung to some of its feathers. Its rectrices were still very short and sheathed. It evidently had been feeding with the adult for its bill was muddy. Sprunt and Chamberlain in *South Carolina Bird Life* (1949) do not mention any breeding records for the interior of the state.—JAMES B. SHULER, JR., *43 Kirkwood Lane, Greenville, South Carolina, April 16, 1963.* (Early in 1957 Douglas E. Wade made a number of tape recordings of courtship calls of the American Woodcock near Columbia, South Carolina. In reporting his observations [*Chat* 21:73-78, 1957] the statement is made that "Since there are few records of Woodcock nesting in South Carolina, it can be assumed that most *peenting* in South Carolina is done by migrant birds—birds that will move farther north to complete nesting activities." This assumption is subject to question. Burleigh [*Georgia Birds*, 1958] recorded the species breeding sparingly over much of Georgia.—*Dept. Ed.*).

Black-headed Grosbeaks in Coastal South Carolina.—Early on the morning of March 5, 1963, a bird unlike any I had seen, came to the dining-room feeder at my home at the western edge of Charleston, South Carolina. It stayed only a few minutes, but long enough for me to see the heavy grosbeak bill, the black and white wing pattern, clearly defined white stripes on the black head, and the russet breast. Obviously it was not an Evening Grosbeak and I knew of nothing in the East that was anything like it. I turned to Pough's "Western Guide," and there it was: a Black-headed Grosbeak (*Pheucticus melanocephalus*).

The bird returned on the 6th of March and I watched it four different times on March 7. At first I was undecided about the sex, but after noting the unstriped russet breast and consulting E. Burnham Chamberlain, I was satisfied that it was a young male.

I was away from the city for three weeks following March 8, and as my feeders were bare during my absence I thought I had seen the last of the bird. However, upon my return on March 30 it appeared at my garden bird bath and it was there again on April 1. Since there was no South Carolina specimen of the Blackheaded Grosbeak in the collection of the Charleston Museum, the bird was taken and presented to that institution on April 1. As suspected, it was a young male.

Just prior to the appearance of this bird at my feeder, John Henry Dick reported observing a female Black-headed Grosbeak in the yard of a residence about five miles south of my home. It remained in the neighborhood for some weeks. On April 20, T. A. Beckett, III, who took the bird at my feeder, observed a male at his feeders at Magnolia Gardens, about five miles north of my place. These records seem most unusual for a species of the far west.—WILHELMINA M. (MRS. R. H.) COLEMAN, *1299 Old Towne Road, Charleston, South Carolina, April 22, 1963.* (The first Black-headed Grosbeak recorded for South Carolina was taken at Kingstree on February 26, 1957 [*Chat* 21:91]. As far as we know, that one, and the occurrences noted above, are the only records for the state.—*Dept. Ed.*)

A Dickcissel Near Charleston, South Carolina.—On February 7, 1963, I found a female Dickcissel (*Spiza americana*) in our yard on Wadmalaw Island, Charleston County, South Carolina. It was a new bird to me but luckily it fed regularly in the yard for over two months and I was able to watch it almost daily. I saw it last on April 13. I am convinced, however, that it was in our vicinity longer than my record indicates, possibly all winter. With the help of my books I was able to identify it, and B. R. Chamberlain, who spent an afternoon with me studying the bird, confirmed my identification.

We had been scattering two or three pounds of bird seed a day on the ground right outside the back door. In such close proximity, the usual birds, which frequently numbered 75 to 100, were easily recognizable without binoculars. On February 7, I was using binoculars, nevertheless, in an attempt to locate a one-legged White-throated Sparrow, a difficult assignment with the naked eye when it was in the company of 40 other White-throats and an assortment of Slate-colored Juncos, Cardinals, and House Sparrows. Suddenly this strange "sparrow" was in the field of my glasses. It was the size of a House Sparrow with a definitely yellowish wash over the entire breast. There was some streaking on the breast and sides and a clear and rather wide line above the eyes. In later views I noted the interesting cheek patch, the line bordering the throat and some show of reddish-brown at the bend of the wing.

An interesting feature about its behavior is the fact that I never saw it come into the yard unless the House Sparrows were there, and since it has left we now have only a third of the House Sparrows we had before it joined their group. It bore such a resemblance to the female of that species that I had to verify its presence with binoculars even after I became accustomed to its appearance.—CORINNE N. (MRS. H. S.) PETTIT, *Wadmalaw Island, South Carolina, April 22, 1963.*

Dickcissel at Greensboro, North Carolina.—A male Dickcissel (*Spiza americana*) was seen feeding with House Sparrows under a seed feeder about three yards from my window at Greensboro, North Carolina, on October 28, 29, and 30, 1962. It came and went with the sparrows at frequent intervals during each morning of its stay, and three other Piedmont Bird Club members were able to see it: Misses Ida Mitchell and Etta Schiffman, and Mr. Brad Hawkins. The bird was lighter in color than the sparrows and perhaps for this reason it appeared larger. It was less mottled on the back than the sparrows, with a striped pattern. The black throat was partially obscured, but the chestnut patch at the bend of the wing was noticeable. During pauses in feeding, it stood upright and then looked like a small meadowlark. It picked up milo, millet, wheat, and oats tossed out of the feeder by sparrows and Blue Jays.—MRS. ROBERT E. MCCOY, *2014 Hamilton Road, Greensboro, North Carolina, May 13, 1963.*

Correction—

The authors of the article "Mallards nesting in Wake County, North Carolina," which appeared in the December 1962 (*Chat*, **26**:89) issue, have realized that there is some confusion as to the meaning of the last sentence in paragraph five of this article. Therefore the following statement should be substituted for this sentence: *They indicate rather that many of the reported cases of nesting Mallards refer to semi-wild birds which were either released by gun clubs or which escaped from domestication* (Stewart and Robbins, 1958; Murray, 1952).

BOOK REVIEWS

Life Histories of North American Birds. Arthur Cleveland Bent.
Wild Fowl. Part One. 244 pp. $2.35.
Wild Fowl. Part Two. 315 pp. $2.35.
Shore Birds. Part One. 420 pp. $2.35.
Shore Birds. Part Two. 412 pp. $2.35.
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Of all the many bird books that have appeared in recent years, these five reprints by Dover will rank highly. Most people interested in birds have at least heard of the famous Bent "Life History" series, because it has long been considered as the standard, most complete reference source on all North American birds. Unfortunately, original copies are not only hard to find among used-book dealers but they are also quite expensive.

The Dover Company is to be applauded for now making available these volumes at such a nominal cost and ornithologists of all ranks will want to purchase all these volumes. Dover intends to reprint all the Bent volumes (about 20), so that a person can gradually add them to his library.

Each of these is "complete and unabridged, containing all the original illustrations." In the volumes which I have, the reprinted illustrations are not quite as sharp as the originals, but this is perfectly understandable and certainly does not detract materially from these works. Of greater importance is the fact that these Bent volumes contain virtually "everything known about life cycle and habits of each bird, with abundant references to authorities past and present. His studies cover in detail nesting, courtship, eggs, the care of the young, plumage, field marks, voice, behavior, enemies, migration and winter ranges."—DAVID W. JOHNSTON.

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BRIEFS FOR THE FILES

Red-necked Grebe, 1 on Forest Lake near Fayetteville, N. C., February 28 through March 4, or longer, in good winter plumage, Doris C. Hauser, Henry and Claude Rankin, *et al.* • **Gannet**, 1 adult in Charleston Harbor, S. C., March 14, Norman A. Chamberlain. • **American Bittern**, 1 at Lake Katherine, Columbia, S. C., March 31 and April 14, Mrs. B. W. Kendall. • **Golden Eagle**, 1 immature at Fairlawn Plantation, Charleston County, S. C., December 23, 1962, Jeri Eggleston, *fide* Mrs. Clyde Sisson. • **Pigeon Hawk**, 1 male perched at close range on a surveyor's rod on Pea Island, N. C., January 27, John Thompson. • **Sora**, 1 near Murrell's Inlet, S. C., December 30, 1962, Mrs. Ellison D. Smith. • **Purple Sandpiper**, 5 on rock jetties at Ft. Macon, Morehead City, N. C., January 19, Mrs. J. M. Potter, Jr.; 26 counted singly and in twos or threes with Ruddy Turnstones on the South Jetties in Charleston Harbor, March 18, B. R. and N. A. Chamberlain. • **American Avocet**, 3 on Bodie Island, N. C., January 13 and 27, John Thompson. • **Great Black-backed Gull**, 2 immatures with 1 adult at Murrell's Inlet, S. C., December 30, 1962. The adult was seen again, December 31, 1962, and January 1, Mrs. Ellison D. Smith; 2 adults at Wrightsville Beach, N. C., December 4, 1962, Mrs. Sam Earle. • **Ruby-throated Hummingbird**, 1 at Wilmington, N. C., March 20, Mrs. Betty Everson. • **Pileated Woodpecker**, 1, Lake Katherine, Columbia, S. C., April 25, Mrs. B. W. Kendall. • **Red-cockaded Woodpecker**, 7 in a yard near Alligator River, Tyrrell County, N. C., January 26, John Thompson. • **Red-breasted Nuthatch**, 1 on Duke University campus, Durham, N. C., January 27, Henry A. Hespenheide. • **Orange-crowned Warbler**, 5 or more at widely separated feeders at Fayetteville, N. C., January 16 to mid-February, Doris C. Hauser; 1 in yard at Clemson, S. C., from December 25, 1962 through early March, Gaston Gage. • **Prairie Warbler**, 1 at Columbia, S. C., March 31, Mrs. B .W. Kendall. • **Yellow-breasted Chat**, 1 at Salter Path, Carteret Co., N. C., January 19, Mrs. J. M. Potter, Jr.; 1 at a feeder at Charleston, S. C., during most of the last half of February, Mrs. M. D. Richardson. • **Baltimore Oriole**, 1 at Columbia, S. C., February 3, Mrs. Tom Ruff; 1 male at Wilson, N. C., February 21, G. Thomas Taylor; abundant all winter in the Fayetteville, N. C., area, with as many as 20 or 30 together at some feeders, Doris C. Hauser; some present all winter at Zebulon, N. C., Mrs. J. M. Potter, Jr. • **Rose-breasted Grosbeak**, 1 brilliant male at Columbia, S. C., April 28, Mrs. B. W. Kendall. • **Painted Bunting**, 1 male, Columbia, S. C., April 25, Mrs. B. W. Kendall. • **Evening Grosbeak**, 1 at Columbia, S. C., March 2 through 5, Fred Sample. 1 male and 1 female at ferry dock, Bodie Island, N C., March 3, John Thompson. • **Purple Finch**, 2 females at feeder at Chester, S. C., April 15, William C. Miller. • **Redpoll**, 1 male apparently exhausted, picked up at McClellanville, S. C., February 9, examined and released. Eight or ten were watched feeding under cedar trees at the same site a few days later, Edgar Jaycocks, Mgr. U. S. Fish & Wildlife Refuge.—Compiled by B. RHETT CHAMBERLAIN. *All dates 1963 unless otherwise shown.*

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization with no paid personnel. Dues, contributions, and bequests to the Club are deductible from State and Federal income and estate taxes.

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Supporting	$5.00	Affiliated Club	$2.00

Life—$100.00 (payable in four consecutive annual installments)

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The activities of the Club and the coverage of *The Chat* will grow in amount and quality as increased funds become available. Prompt payment of dues and the securing of new members are vital contributions open to everyone.

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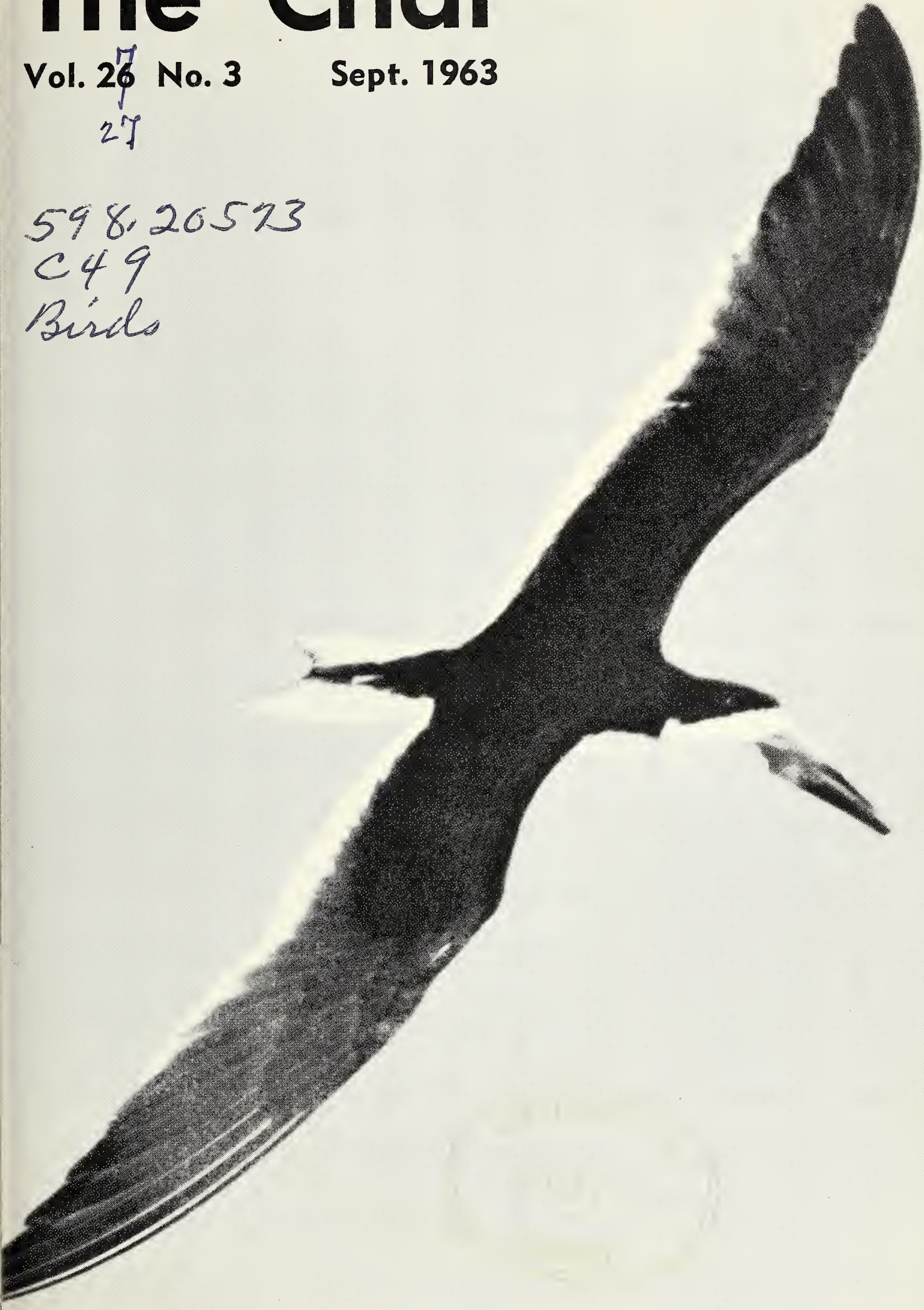

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Editor: Eloise F. Potter, Box 487, Zebulon, N. C.

Department Editors: Annie Rivers Faver, Eastover, S. C., B. Rhett Chamberlain, Rt. 1, Box 48, Wadmalaw Island, S. C.

Contributing Editors: Ernest Cutts, Harry Davis, Jack Dermid, James Mattocks, Fred H. May, Thomas W. Simpson, Kay Sisson.

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Cover Photo—Black Skimmer, photographed at Battery Island, N. C., by Jack Potter. Cover printing donated by Theo. Davis Sons, Printers, Zebulon, N. C.

A BLUEBIRD REPORT

By Charles T. Downer

Two years ago the writer agreed to make a survey of the Bluebird (*Sialia sialis*) situation in Polk County, North Carolina, to aid the Massachusetts Audubon Society in its endeavor to arrive at some conclusions concerning the apparent decrease in Bluebird population in the Eastern United States.

The 1961 report was more or less meaningless for no prior data were available, but it did reveal a few pertinent facts the most important of which, to my way of thinking, was the wonderful response of the public in its desire to cooperate. The first step was to locate inspection stations in different parts of the county (it is obvious one person could not cover the entire county). Therefore the boxes to be covered were selected so as to cover a representative or geographical area. Nine boxes were decided upon and each one visited every 4 or 5 days or until the nest was abandoned and not in use. The 1961 report showed that 59 eggs produced 43 young birds.

In 1962 a slight change was made in location of the boxes but not enough to make any area difference. Two of the 1961 stations were dropped and 8 additional new ones were added. Now 14 stations are under observation and will be under study for 1963. These 14 stations produced 80 birds from 103 eggs.

By inspecting the accompanying table it is easy to see how close the 1961 figures come to the 1962 figures. Also note that in 1961 Moore box #6 one nesting produced 9 eggs all of which did not hatch. The eggs were removed, opened, and were addled. As far as I can find out this is a record clutch and if the second clutch of 6 eggs was produced by the same pair, and all indications point to that conclusion, then this one pair produced 15 eggs.

The same box in 1962 first produced 5 eggs. Two males were present and the female seemed confused. In fact, the eggs did not hatch and were removed. Then the extra male disappeared. Nesting took place in another box nearby and two broods were brought off. Four eggs and 3 eggs resulted in 5 birds.

Box #5, Foy: 3 nestings took place in 1961, and six birds were produced. In 1962 this same station produced 4 nestings. However, one clutch of 5 eggs did not hatch and the eggs were removed and opened. Embryo birds were in the eggs but the eggs were black inside. In this case the female, after sitting for two weeks, no longer went in the box but sat on the outside on top. That was when we took the eggs and cleaned out the box. It was noted that children played in the yard near the box and in 1962 this intrusion was most annoying, therefore the abandonment. Another box was placed on the other side of the house and the 3rd and 4th nesting took place. The 4th began August 1 and by August 21st the last 4 birds arrived.

In all cases the boxes were cleaned out after the fledglings left. This procedure, I feel, is quite necessary. In one instance, a box was 8 feet up on a tree and fastened very securely. The top could be removed and I was on a step ladder. Before I could complete the task I was covered with ants from head to foot, necessitating removing my clothing.

Conclusion thus far:

Provide nesting sites of the proper type and location and there will be more Bluebirds breeding.

Eliminate indiscriminate insect spraying of the countryside especially along the road sides and fence rows.

I am still of the opinion that the black snake in this part of the country is a prime predator.

I firmly believe that the Bluebird population in this county is about all one could expect at present. The results of 1963 will confirm this, I fully expect.

SMITHSONIAN INSTITUTION JAN 20 1964

COMPARISON TABLE

Observer	*Station*	*Year*	*Broods*	*Eggs*	*Young Birds*
Downer	#1	1961	2	6	5
"	#1	1962	2	6	3
Wahler	#2	1961	2	5	4
"	#2	1962	3	8	8
Foy	#5	1961	3	9	6
"	#5	1962	4*	17	12
Moore, Mrs. H. L.	#6	1961	1	15	6
"	#6	1962	3	12	5
Hudgins	#8	1961	3	9	9
"	#8	1962	3	9	8
Head	#7	1961	2	6	5
"	#7	1962	3	9	8

* one set not incubated.

NEW 1962 STATIONS

		Broods	*Eggs*	*Young Birds*
Feaghan	1 Box	1	4	4
Fenner	1 Box #10	3	9	9
Geer	Fence Post	2	8	3
Mahler	1 Box	1	4	3
Moore, Mrs. A.	2 Boxes	3	12	12
Rollins	1 Box	1	5	5
Wasson	3 Boxes	never completed nests		
Snakenberg	1 Box**			

** Record incomplete. This box had 2 nestings. The first was the victim of a snake. The 2nd no accurate record was made.

One factor that should be investigated would be a winter count: November, December, January and February, for 3 years.

The birds feed on the following: dewberries, blackberries, moths, grasshoppers, caterpillars, insects, and midges.

When grass and straw are not available pine needles are used as nesting material. It is a good idea to scatter dried grass in the vicinity of the box.

Pressure from Starlings, House Sparrows, and Mockingbirds is an annoying feature. The sparrows are persistent and discourage the Bluebirds to the point where the latter give up and move on. Pressure from Mockingbirds seems to be an annoying feature, but I don't think it is serious enough to warrant further study.

Placing boxes too close causes confusion and unless the ecological conditions are at top working order it is a useless effort. Boxes should be placed 100 feet apart and not more than 7 feet high.

By logical reasoning and observation in other parts of the state, I have come to the conclusion that all the Bluebird needs are conditions that I have cited in a former part of this report. Let us hope that the 1963 report will prove our point.

Box 1441
Tryon, North Carolina
November 15, 1962.

RED-COCKADED WOODPECKERS IN CHESTERFIELD COUNTY, SOUTH CAROLINA

BY LEE JONES

Field observations made by the author and others during a period extending from November 17, 1962, until June 6, 1963, indicate that the Red-cockaded Woodpecker (*Dendrocopus borealis*) is a well-established wintering and breeding species on the Carolina Sandhills National Wildlife Refuge in Chesterfield County, South Carolina.

The Sandhills Refuge is 125 miles from the coast on the edge of the Coastal Plain region and possibly as far from the coast as one would ever expect to find the Red-cockaded Woodpecker in South Carolina. *Birds of South Carolina* gives Aiken, Richland, Lee and Dillon counties as the farthest south and west the bird has been reported. The species is not on the refuge check-list dated February, 1958.

All observations of these woodpeckers were made during six visits to the refuge extending over a period of 6½ months. The area covered was a relatively small plot in the south-central portion of the refuge where there is a concentration of lakes and the general terrain is not so arid as elsewhere.

On my first visit to the refuge, November 17, 1962, I found one Red-cockaded Woodpecker. Because of the scarcity of these birds in this area I returned on December 29. On this trip I located over 40 individuals in the 6 hours I was there. The number of birds present on the refuge was astonishing since the Red-cockaded Woodpecker had been nearly absent in this region before. I was not able to return again to the refuge until April 21. At this time I found the birds in the earlier stages of nesting. On this and the remaining three trips of April 27, May 30 and June 6, I was able to observe an active nesting site and locate ten additional nests. During the period that these birds were under observation I was able to study, briefly, two stages of the birds' life history, the winter season and the earlier stages of the breeding season.

WINTER FEEDING GROUPS

The birds observed on December 29, which apparently comprised several winter feeding groups, traveled in compact groups of 4 to 6 birds, occasionally more. I counted 10 birds in 1 group; however, this group eventually split into 2 distinct groups of 5 birds each. I never saw a lone bird away from a feeding group, except for the bird seen on November 17.

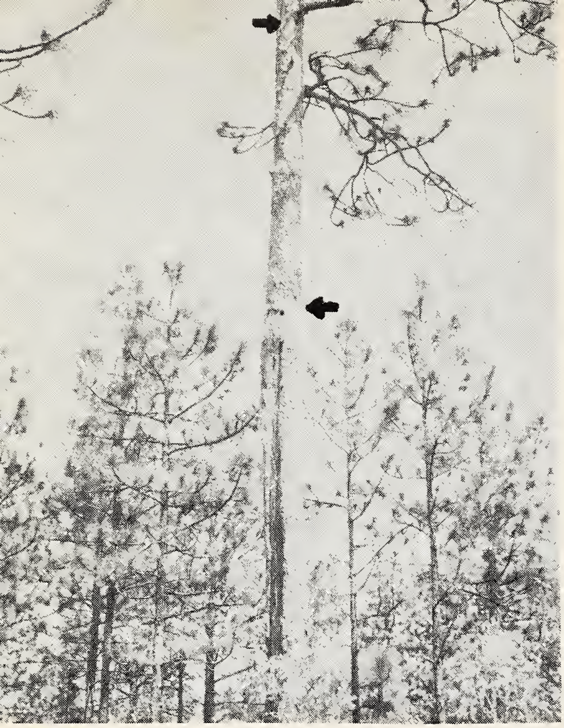
All of the woodpeckers were feeding in pine trees, most Loblolly (*Pinus taeda*) and Long-leaf (*Pinus palustris*). They never ventured into dense woodlands on areas planted in second growth pine. They preferred the more open, mature woodlands where the trees were 10 to 60 feet apart and over 30 feet tall. The woodpeckers foraged chiefly in the company of Carolina Chickadees (*Parus carolinensis*), Brown-headed Nuthatches (*Sitta pusilla*), Pine Warblers (*Dendroica pinus*) and other woodpeckers, the nuthatches being the most common associates. Nearly always, a group of these tiny birds indicated the presence of Red-cockaded Woodpeckers.

According to *The Audubon Land Bird Guide* and *Birds of North Carolina*, Red-cockaded Woodpeckers are to be looked for in the uppermost branches of pines; however, most of the birds that I observed were feeding on the trunks of the trees often below the lowest branches, or at the base of the lower branches.

NESTING DATA

By April 21, the time of my next visit, the birds had paired off and begun their nesting chores. At this time 8 nests were located and 3 more were found on April 27. All 11 nests were inside of ½ mile along a trail off the main highway (S. C. 145).

Most of the nests were located in a tree slightly larger and set apart from the others. All but one of the nests were on the southwest side of the



Typical nesting tree showing active nest (lower arrow) and abandoned nesting cavity (upper arrow), possibly once used by same pair. Note the long vertical split in the trunk below the active nest. (Photo by Joe Norwood)

tree and usually just above a long vertical split in the trunk, possibly the result of tapping for turpentine when the tree was younger. The reason that the birds built their nests on the southwestern side of the tree was probably to protect the nesting cavity from the wind and rain which is often from the north and northeast in this area, but this is only a theory.

Perhaps the most significant mark in locating the nests was the whitish appearance of the trunk near the nest which is very noticeable even at a long distance. This whitish area is caused by hardened sap which has oozed from many small holes drilled by the nesting birds around the nesting cavity. The woodpeckers drill these holes near the nest to use the resulting sap residue as a defense barrier against ants and other crawling insects; however, I noticed several small ants inside the area of sticky sap at the active nest under observation. I do not know whether the ants crossed the barrier or whether the adult birds carried them to the nest on their feathers or other parts of their bodies.

On May 30, Joe Norwood and I found young in the nest. We set up our equipment about 80 feet from the nest and watched the parents at the nesting site. For a while the birds were reluctant to enter the nest in our presence, but after 15 minutes or so they began to enter and leave freely with food. Both parents helped equally with the feeding schedule and ranged out about 150 to 200 feet from the nest in search of food. The young were fed every 1 to 5 minutes on the average, but this may have been more often than usual since we had interrupted their feeding schedule for so long.

It was difficult to determine what the parents were feeding the young at that distance; however, we were able to see them carrying small beetles and larvae, probably of the same species. Twice we noticed them bringing an insect to the nest that looked like a cricket, though most of the insect was obscured by the bird's bill and we could not be sure.

Before leaving, Mr. Norwood and I estimated the height of each nest. The average height was 25 feet, the highest being about 40 feet and the lowest only 7½ feet. Arthur T. Wayne in Bent's *Life Histories of North*

American Woodpeckers states that the nests he found ranged from 18 to 100 feet high. The nest we found only 7½ feet high is considerably lower than the 18-foot minimum mentioned by Wayne, and the others were well below average.

DISCUSSION

It seems remarkable that a bird as exclusive as the Red-cockaded Woodpecker had been overlooked on the refuge all these years. The possibility of a sudden increase of birds in the last few years is unlikely since we found an old nest in a tree that has been dead for at least 5 years. Red-cockaded Woodpeckers supposedly never nest in dead trees—only living trees with dead centers. As mentioned at the beginning of this report, the bird is not on the check-list of 1958; however, Earl Cunningham, Refuge Wildlife Management Specialist, has seen Red-cockaded Woodpeckers on one or two occasions since then. But these observations do not explain the sudden "increase" to over 40 individuals seen on a small part of the refuge within 6 hours.

It is difficult to draw any definite conclusions on the status of the Red-cockaded Woodpecker on the Carolina Sandhills Refuge until many more observations are made. An intensive study of the bird at all seasons under constant surveillance is needed to complete this report.

ACKNOWLEDGEMENTS

I would like to thank Mr. Norwood for his assistance during the nesting season and for the use of his photographs in this report. I am also very grateful to Ernest F. Holland, Refuge Manager, and his staff for allowing us to roam the refuge freely and to the many others who helped me in many ways during the course of this study.

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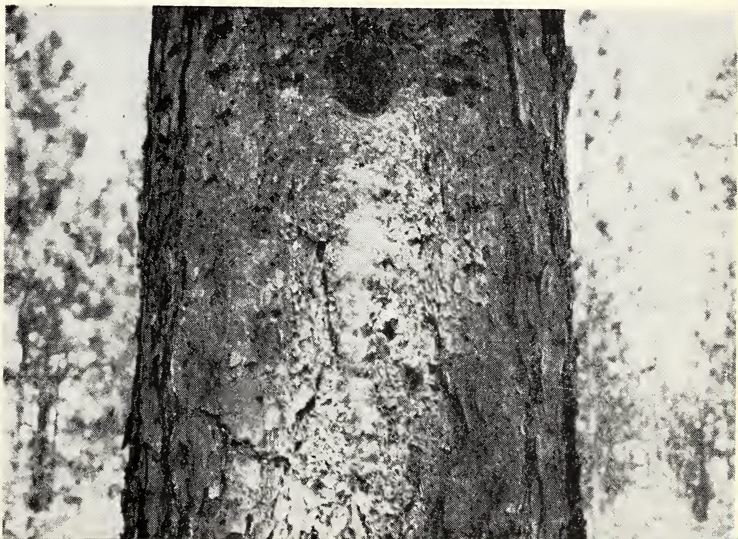
1616 Wendover Road
Charlotte, N. C.
August 26, 1963.



Close-up of a nesting cavity entrance showing resin deposits and hack marks made by the nesting birds. (Photo by Joe Norwood)

BACKYARD BIRDING

Carolina Wrens have always been noted for the outlandish nesting sites they choose. One of the most unusual instances I have ever heard about was sent in by Miss Emily Culler of Orangeburg, South Carolina. From a clipping from the *Times and Democrat* of Orangeburg:

Baby-sitting for working mothers is a new role for linesmen in the Orangeburg Department of Public Utilities. But recently they have found themselves with four little mouths to feed and four babies to tend all day as they pursue their daily work on their ditch-digging tractor.

This is an unusual predicament for the city workmen, but they have become interested and concerned foster fathers. Six weeks ago a Carolina Wren built her nest in the tool box of a city tractor. She started the nest while the tractor was housed in the maintenance shop for a coat of paint. Finding her nest gone each day after the paint job was completed, she came back each night and proceeded to lay four eggs.

The workmen left the nest undisturbed, but never dreamed the eggs would hatch . . . This little wren flew away each morning when the men took the tractor out. But she was waiting when it returned at 5 p.m., and she sat on the nest all night. Apparently the heat from the tractor motor turned the tool box into an incubator during the daytime.

The birds were hatched last week. Now they go undisturbed on the daily round of work. When the men come in for lunch at noon, the mother bird is waiting to feed them. At 5 p.m. she is there waiting to take over the care of her young for the night.

As young birds require frequent feedings, their foster fathers have taken over the job of supplying their wants. As long as the tractor is moving, it serves as a pacifier. The babies sleep peacefully. When it stops, they wake up and chirp for food. They get it, because the men bring "hoppiegrasses" (colloquial for grasshoppers) and insects for them.

The Department of Public Utilities is in charge of things that satisfy wants and needs of the community. A little Carolina Wren finds that its workers live up to their responsibility.

Backyard birding? Well, maybe!

From Columbia, Mrs. Ellison D. Smith wrote as follows: On March 25, 1963, while visiting at West End on the Grand Bahama Island, I observed what could be called radical departure from normal behavior by a water bird.

I was awakened about sunup by a loud scratching sound on a small patio outside our second story window. I tipped to the window to find a Purple Gallinule clucking like a furious hen and trying to arrange his long toes around the back of an iron porch chair. I was less than six feet away and he was aware of my presence, but it failed to disturb him. I then saw that the object of his ire or curiosity was an old pair of white tennis shoes lying on the patio floor. After some minutes of conversation with the shoes he scrambled down the chair and jumped to the floor where he proceeded to inspect them more closely. He picked up one of the laces in his beak and gave it a jerk. Whether he considered it some new aquatic fare or a sworn enemy, I was unable to determine. Not being able to move the shoes, he flew up and alighted in a nearby coconut palm, where he was still perched when I ceased my observation!

Exasperated Pileated

Birds often do things that seem to us to be perfectly ridiculous. Whether they have or have not a sense of humor, it actually seems at times that they do enjoy pranks. However, we have been told, that in writing about birds we must not "personify" them, or expect them to act like humans. But at times, it is very hard not to, and we certainly can't help being amused or laughing at them.

Sunday morning, before we left Tryon at the time of the CBC Field Trip, Mrs. Sisson, Miss Margaret Sandburg and I went over the mountain to the home of Colonel and Betty Frost. We sat on their patio and watched birds come to several feeders and a "water-fall" pool on the mountainside. A suet feeder made from a post set in the ground with a piece of wire with fairly large mesh tacked around the top of the post, into which suet was packed, took my eye. (I am always looking for something to add to my yard.) When we moved into the livingroom, I was amazed to see a Pileated Woodpecker come to this feeder. It was my first experience of actually seeing one of these birds at a feeder, although I had heard that they would come and had tried myself to attract our pair. Then the Frosts told us of their experience with the young one. One morning, the young Pileated had come to the suet feeder, which is on the wooden post. Near this is a grain feeder on an iron pipe. Something startled the bird from the suet feeder and it dashed to the grain feeder, where it attempted to light just under the container on the iron pipe! It slid down so fast that it landed with a bounce on its tail, and was so astonished that it fled, squawking, through the trees! You can imagine how the Frosts laughed and how they wished they had a movie camera on that scene.

Campus Celebrities

Mrs. Shuford K. Peeler, of Charlotte, sends a story of birding in quite a large "backyard"—Garinger's 63 acre campus:

Three newly hatched Prairie Horned Larks were found on the campus at Garinger High School on Wednesday, March 27. The cup-shaped nest, 3″ in diameter and 1½″ deep, was made of dried grasses with no soft lining. The top of the nest was even with the ground, uncovered, and the nest was built against a clump of grass in a rather barren area. It was located about 25 feet from a gravel walk leading from the gym to the exercise field, tennis courts, baseball field and track, and used by hundreds of students during the day.

On their first school day the young birds looked like one round ball of rather long tan fur. Their skin was very black. Occasionally an orange-red mouth, rimmed with yellow, would open wide. We could see only two mouths, but there seemed to be enough "fur" to account for a third baby lark. Although the temperature in the morning was about 50 degrees and the wind at 10 knots, the female did not go near the nest. However, the young were visited all day by curious students. Almost always boys. The girls showed very little interest. I returned to school at 5:30 p.m. and from then until dusk the female brooded the birds at about 10-min. intervals.

On Thursday morning, in order to protect the nest, some one had placed a 12-inch stake about 15 inches from the nest. The nest was difficult to see and students were permitted to walk across the campus from the parking lot in this area. With binoculars I checked the nest about every 30 minutes and saw the female near the nest only once (at 12:45 p.m.). The students

(Continued on Page 52)

SPRING COUNT—1963

By Eloise F. Potter

Nearly 43,000 birds of 219 species were observed by 180 participants in the sixteen Spring Counts conducted in the Carolinas and submitted for publication in *The Chat.*

One new count area is included in the reports. In Iredell County, N. C., a group of young people organized a count under the leadership of Mark Simpson, Jr. Cooperative parents provided the necessary transportation.

As Dr. D. W. Johnston pointed out in his introduction to the 1962 Spring Count (*Chat* 26:58), it is hazardous to make comparisons when there are several variable factors such as weather, areas reporting, and number of party-hours; however, some likely trends do seem to be in evidence in the table below.

	1960	1961	1962	1963
Number of counts	12	17	15	16
Number of observers	130	191	157	180
Number of Bluebirds	122	282	150	261
Number of Starlings	1736	2338	3743	2518
Number of Evening Grosbeaks	75	0	132	0
Number of Cattle Egrets	6	57	62	123

It is impossible to determine whether the fluctuation of the Bluebird count is related to the increase and decrease of Starlings or whether this apparent trend is caused by additional pressures on the Bluebird and/or variations in the census techniques. Certainly the Starling, which competes aggressively for nesting cavities, is a factor in nesting failures of the Bluebird. Although there were a few scattered reports of Evening Grosbeaks in the Carolinas during the winter of 1962-63 (*Chat* 27:7,22,34), their total absence on the present count indicates that there was no major flight. Cattle Egrets continue the upward trend noted by Johnston in 1962.

Aiken, S. C. (area about 40% bottomland hardwoods; 40% open pine lands and pine plantations; 20% ponds, carolina bays and the big lake resulting from a dam built to increase water supplies for cooling reactors at the Savannah River Project).—May 4; 6 AM to 5 PM. Clear; temp. 41-78°; wind NE. **Total species, 90; total individuals, 536.** Five observers.—Donald L. Funking, Dr. J. H. Jenkins, Jay H. Schnell (compiler), Dr. Richard G. Wiegert, Robert F. Williams.

Anderson, S. C. (area same as in Christmas Count, all points within a 15-mile diameter circle, center at Anderson Airport).—May 4; 4 AM to 7:30 PM. Clear; temp. 43-80°; wind SW 0-5 mph. Twelve observers, 11 in 5 parties, 1 at feeder. Total party-hours 68 (42 on foot, 26 by car); total party-miles, 315 (285 by car, 30 on foot). **Total species, 113; total individuals, 3636.** The **Green-winged Teal** and **Horned Lark** are very late for this area. (Seen in the area during count period, but not on count day: Pectoral Sandpiper, Lesser Yellowlegs, Osprey, Yellow-billed Cuckoo, Parula Warbler, **Bay-breasted Warbler.** The Bay-breasted Warbler is quite unusual in spring in this area, although they have been seen in fall migration. This bird was a male observed in the company of Blackpoll Warblers by AMT and CW.)—Mr. and Mrs. R. C. Brownlee, Mrs. Rufus Fant, Mrs. A. A. Hutchinson, Mr. and Mrs. C. B. Nichols, Mrs. Earl Rice, R. C. Tedards, Mrs. R. C. Tedards (compiler), Reggie Titmas, Bob Watson, Mrs. Joe Watson.

Ashe County, N. C. (area center at Hurt's farmhouse, as in Christmas Count and Breeding Bird Census).—May 5; 5:30 AM to 7 PM. Mostly clear; temp. 48-60°. Five observers in 2 parties. Total party-hours, 20 (19½ on foot, ½ by car); total party-miles, 19 (17½ on foot, 1½ by car). **Total species, 77; total individuals 580.** (Seen in area during count period, but not on count day: 1 Great Blue Heron, 2 Mallards, 1 Osprey, 2 Ruffed Grouse, 1 Barred Owl, 1 Whip-poor-will, 2 Pileated Woodpeckers, 12 Bobolinks, 2 White-throated Sparrows.)—Bettie Jane Carter, Billie Ann Carter, Mrs. A. B. Hurt (compiler), Alice Lyall, Mike Welch.

Central Beaufort County, N. C. (all points within a 15-mile diameter circle where Upper Goose Creek enters Pamlico River, including both sides of the river from Bath to Washington; river and river shore 15%, fields 30%, mixed woods 40%, pine woods 5%, feeders 10%).—May 5; 5 AM to 8 PM. Partly cloudy or overcast all day; temp. 53-80°; wind NE 3-12 mph. Nine observers in 3 parties. Total party-hours, 42 (20 on foot, 22 by car); total party-miles, 189 (12 on foot, 177 by car). **Total species, 86; total individuals, 2070.** The **Brown Creeper** is a late report. (Seen in area during count period, but not on count day: Wood Duck, Greater Yellowlegs, Lesser Yellowlegs, Bonaparte's Gull, Ruby-throated Hummingbird.)—Ethel Barkley, Ruth Brown, Geraldine Cox (compiler), James MacLaurin, Mary MacLaurin, Ed Marrow, Thelma Marrow, Louise Satterthwaite, Ray Winstead.

Chapel Hill, N. C. (all points within a 15-mile diameter circle, center at intersection of Columbia and Franklin streets, including town of Chapel Hill and university campus, Carrboro, airport, Lake Forest and university lakes, Finley Golf Course, Mason farm; mixed and deciduous woodlands 25%, open fields and farm lands 30%, lake shores and creek banks 25%, pine woods 5%, wooded residential 15%).—May 5; 5 AM to 6 PM. Clear; temp. 51-82°; light northerly wind. Twenty-four observers in 12 parties. Total party-hours, 57 (45 on foot, 12 by car); total party-miles, 110 (32 on foot, 78 by car). **Total species, 97; total individuals, 3169.** The scaup was a Lesser Scaup. (Seen in area during count period, but not on count day: 1 Green Heron, 1 Osprey, 1 Magnolia Warbler.)—Dr. and Mrs. Charles H. Blake, David Barnes, Louise Crumpacker, Mr. and Mrs. Francis Harper, Robert H. Helle, Stella Lyons, Mr. and Mrs. Gerald R. McCarthy, Mrs. W. D. Patterson, Wallace Patterson, Jr., Phillips Russell, Wiley B. Sanders, Mr. and Mrs. Robert B. Sharpe, Mrs. Pearson Stewart, Elizabeth P. Teulings, Robert P. Teulings (compiler), Mr. and Mrs. Matt L. Thompson, Mrs. Adelaide Walters, Mrs. Fred R. Weedon, Frances L. Yocom.

Charleston, S. C. (all points within a 15-mile diameter circle, center 14 miles NE of Mt. Pleasant and ½ mile E of US Hwy. 17, but excluding Bull's Island and adjacent waters and marshes; fresh water ponds and wooded swamps 25%, open fields and farmland 20%, mixed and pine woods 25%, salt water creeks, marshes and flats 30%).—April 27; 6:30 AM to 6 PM. Sunny; temp. 50-75°; wind variable 0-10 mph; woods dry, water low in swamps and ponds. Sixteen observers in 5 parties. Total party-hours, 44 (28 on foot, 16 by car); total party-miles, 248.6 (29 on foot, 219.6 by car). **Total species, 133 ; total individuals, 3657.**—Roy Baker, Edwin Blitch, Mrs. Francis Barrington, T. A. Beckett, III, B. Rhett Chamberlain, E. Burnham Chamberlain (compiler), David Chamberlain, E. C. Clyde, Jr., Mrs. R. H. Coleman, John H. Dick, E. S. Dingle, R. D. Edwards, Mrs. J. F. Holbrook, Mrs. J. A. Leland, Louis Towles, E. A. Williams (members and guests, Charleston Natural History Society).

Charlotte, N. C. (7½-mile radius centering at 7th Street and Briar Creek; open field and farmland 50%, deciduous-pine woods and edge 35%, city lawns 10%, lakes and ponds 5%).—May 4; 5 AM to 7:30 PM. Fair; temp. 46-81°; wind SW 0-9 mph. Sixteen observers in 5 parties. Total party-hours, 39½ (29 on foot, 10½ by car); total party-miles, 201 (17 on foot, 184 by car). **Total species, 107; total individuals, 3438.** The **Common Gallinule** was unexpected, and the 72 Tree Swallows were unusual for the area.—Dr. and Mrs. W. G. Cobey, Mrs. M. J. Barber, Mrs. Douglas Booth, Mrs. Harold Dillehay, Lee Jones, Mr. and Mrs. A. A. Kittinger, Mrs. J. H. Lovell, Miss Sarah Nooe, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mrs. George Potter, Mrs. E. J. Presser, Dennis Shepler, Miss Ernestine Thies. (Some of the above were part-time participants and were not officially counted.)

Eastover, S. C. (7½-mile radius, town of Eastover as center; cultivated fields 33%, pasture 33%, residential 10%, deciduous and pine woods 14%, swampy areas around ponds 10%).—May 3; 6 AM to 6 PM. Clear; temp. 44-75°; calm to moderate wind. Three observers in 1 party. Total party-miles, 25 (24 in car, 1 on foot). **Total species, 93; total individuals, 1281.** Of particular interest is the **Knot** which was seen by all three observers.—Annie Rivers Faver (compiler), Margaret Hoover King, Kay Curtis Sisson.

Fayetteville, N. C. (area, 7½ mile radius, centering just north of city on Raleigh Road; deciduous-pine woods, lakes and ponds, open field and farm land, city lawns).—April 30; 5:30 AM to 5:00 PM. Cool, cloudy, some showers; wind SW 15 mph; temp. 50-79°. Fourteen observers including 4 individuals working own yards and 4 parties. Total party-hours, 30; total individual hours, 106; total party-miles, 88 (83 by car, 5 on foot). **Total species, 88; total individuals, 1788.** The Rufous-sided Towhees were found to be 65 Red-eyed and 2 White-eyed.—Mrs. J. E. Courtney, Mrs. N. A. Currie, Jr., Mrs. C. T. Haigh, Mrs. C. T. Haigh, Jr., Mrs. Roscoe Hauser, Miss Catsie Huske, Mrs. John Oates, Mrs. Duncan Owen, Henry Rankin, Mrs. S. C. Rankin, Mrs. J. A. Shaw (compiler), Mrs. John Stewman, Mrs. W. E. Whiddon, Mrs. L. E. Whitfield.

Greensboro, N. C. (area same as in Christmas Count, centering ½ mile SW of WBIG transmitter).—May 4; 4:30 AM to 7:30 PM. Clear; temp. 43-80°; wind variable SSE to SW 4-9 mph. Thirty-four observers in 9 parties. Total party-hours, 91½; total party-miles, 351 (312½ by car, 38½ on foot). **Total species, 129; total individuals, 9176.** The scaup was a Lesser Scaup. The **Philadelphia Vireo** was positively identified by BK and TS.—Mrs. Locke Bell, Mr. and Mrs. David A. Cason, Mrs. Ellene Cobb, Inez Coldwell, Kelly Culbreth, Mr. and Mrs. G. W. Daniels, Dr. Charlotte Dawley, Mrs. R. D. Douglas, Ruth Gunter, Brad Hawkins (compiler), Sidney Holmes, Bruce Kappel, Mrs. Clarence Knight, Dr. R. L. Lashley, Mrs. Lennon, James Mattocks, Mrs. Robert McCoy, Ethel McNairy, Mrs. H. L. Medford, Ida Mitchell, Elizabeth Ogburn, Mr. and Mrs. George Perritt, Mrs. C. N. Prince, Etta Schiffman, George Smith, Mrs. W. F. Smyre, Thomas Street, Mrs. C. R. Surratt, Mrs. D. G. Tipton, Mrs. Ralph Weisner (The Piedmont Bird Club).

Henderson, N. C. (area from Ruin Creek to Satterwhite Point, about 14 miles, and on two or three side roads for short distances; lakesides 15%, roadsides 30%, field edges and meadows 13%, deciduous and pine woods 10%, creeks 30%, and dooryards 2%).—May 4; 8 AM to 6 PM. Sunny and very warm; temp. 64-86°; winds calm. Three observers in 1 party. Total party-hours, 10; total party-miles, 45 (5 on foot, 40 by car). **Total species, 76; total individuals, 911.**—Mrs. A. W. Bachman, Mariel Gary, Garnette Myers (compiler).

Iredell County, N. C. (15-mile diameter circle centered at junction of Hanes Grove Road and rural 1872 in northern Iredell County; 80% lowlands and riverbottoms; 10% open farmland, 10% mature deciduous forest on mountain).—April 27; 4 AM to 3:30 PM. Cool before dawn; clear, hot, and calm during morning; overcast, slightly windy in afternoon. Eleven observers in 4 parties. Total party-hours, 76; total party-miles, 235½ (220 by car, 15 on foot, ½ by boat). **Total species, 79; total individuals, 1183.** (Seen in area on day prior to count: 3 Summer Tanagers.)—Mrs. Lois T. Goforth, Flippen Jones, Ted Melson, Anne Presnell, Mrs. Elaine Rines, Chip Shafer, Jane Sherrill, Mark Simpson, Jr. (compiler), Brenda Templeton, Pat Thomas, Ronnie Underwood.

New London, N. C. (15-mile diameter circle centered about 2 miles NW of Badin; open fields and woodlands, 35%, ponds and lakes 25%, mixed woods and hedges 25%, city lawns 15%).—April 27; 5 AM to 6:30 PM. Morning clear, wind NW 5 mph; afternoon partly cloudy; temp. 41-74°. Twelve observers in 4 parties. Total party-hours, 66 (48 on foot, 16 by car, 2 by boat); total party-miles, 257. **Total species, 108; total individuals 5459.** Outstanding finds of the day were the Pileated Woodpecker and the **Common Gallinule**, the latter never having been reported previously in this area. (Seen in the area during the count period, but not on the count day: Louisiana Waterthrush, Scarlet Tanager, Ring-necked Ducks, Cape May Warbler, Purple Finches.)—Roy Blalock, P. E. Book, Mrs. Margaret Crawley, Mr. and Mrs. Barrett Crook, Conrad Crotts, Mr. and Mrs. Wade Crowell, Allen Culp, Mrs. Francis Elkins, Joe Ferebee, Susan Greene, C. M. Haithcock, Mrs. Claude Hinson, Mrs. Myrtle Isenhour, Mrs. Maxine Isenhour, Mrs. Kemp Littleton, Donald Maner, Miss Vera Mason, Mr. and Mrs. James Mauney, Mrs. Faye McLawhon, Mrs. William Mount, C. P. Misenheimer, Sue Trott Parker, Mrs. J. E. Pennington, Spencer Plyler, Irvin Poplin, Mrs. L. A. Price, Eddie Smith, Wayne Smith, Mrs. Jim Thompson, Mrs. John Whitlock (compiler), Miss Mary Winget. (Some of the above were part-time participants and were not officially counted.)

Raleigh, N. C. (area same as in Christmas Count). April 26; 7 AM to 6 PM. Clear and calm most of day; temp. 45-75°. Four observers. **Total species, 83; total individuals, 964.**—J. F. Greene, J. W. Johnston, D. L. Wray (compiler), Mrs. D. L. Wray.

Seven Springs, N. C. (area same as in Christmas Count).—April 27; 5:30 AM to 6:30 PM. Clear and calm; temp. 52-78°. Three observers in 1 party. Total party-hours, 26 (10 on foot, 16 by car); total party-miles, 115 (10 on foot, 105 by car. **Total species, 74; total individuals 439.** (Seen during count period, but not on count day: **Short-billed Marsh Wren**, Hermit Thrush, Black-and-white Warbler, Worm-eating Warbler, **Blue-winged Warbler**, Palm Warbler, Louisiana Waterthrush, Kentucky Warbler.)—David Siler, R. H. Siler (compiler), Mrs. Margaret Walker.

Wilmington, N. C. (area same as in Christmas Count).—April 27; 4:20 AM to 6 PM. Partly cloudy; temp. 45-74°; wind SSW 2½ mph to SE 16 mph. Nine observers in 5 parties. Total party-hours, 48; total party-miles, 307 (23 on foot, 282 by car, 2 by boat). **Total species, 126; total individuals, 4503.** The **Lark Sparrow** was an adult observed at close range with all field marks noted by DE. (Seen in area the day before count: Pied-billed Grebe, Virginia Rail, Blue-winged Warbler.)—Mrs. Katharine Alexander, Mrs. Mary Baker, Jack Dermid, Mrs. Dot Earle (compiler), Mrs. Betty Everson, Claude McAllister, Mrs. Polly Mebane, Mrs. Mary Urich, Mrs. Marie Vander Schalie.

	Individual Totals	Beaufort Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Seven Springs, N. C.	New London, N. C.	Eastover, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Charlotte, N. C.	Anderson, S. C.	Greensboro, N. C.	Iredell Co., N. C.	Ashe Co., N. C.	Fayetteville, N. C.
Common Loon	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Red-thd. Loon	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pied-billed Grebe	6	..	..	4	..	..	1	..	..	..	..	..	..	1	..	..	..
Brown Pelican	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Dbl.-cr. Cormorant	37	22	8	7	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	12	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	27	2	13	4	..	1	1	..	1	..	..	..	..	4	..	..	1
Green Heron	38	1	17	7	..	..	..	4	..	..	..	1	2	5	1	..	..
Little Blue Heron	23	..	2	13	..	..	8	..	..	..	..	..	..	..	..	..	..
Cattle Egret	123	1	85	34	..	..	1	..	..	..	..	..	..	..	..	..	2
Common Egret	53	..	23	24	..	..	4	1	..	..	..	..	..	..	..	..	1
Snowy Egret	10	.	1	9	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	16	..	2	14	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Nt. Heron	3	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..
Yel.-cr. Nt. Heron	2	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Least Bittern	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
American Bittern	5	..	..	1	1	1	..	..	..	..	..	..	..	2	..	..	..
Glossy Ibis	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	41	..	..	41	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	8	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	1
Mallard	25	..	..	..	..	..	..	4	..	..	..	..	4	12	..	..	5
Black Duck	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Green-wg. Teal	1	.	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Blue-winged Teal	43	..	1	8	4	5	10	4	..	..	..	..	5	6	..	..	..
Shoveller	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood Duck	63	..	12	9	1	2	..	2	..	..	2	..	4	12	..	11	8
Ring-necked Duck	7	..	..	5	..	..	..	2	..	..	..	..	..	..	..	..	..
Scaup (sp.)*	4	..	..	2	..	..	..	..	..	..	1	..	..	1	..	..	..
Ruddy Duck	2	..	..	2	..	..	..	..	..	..	..	.	..	..	..	..	..
Red-br. Merganser	6	..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Turkey Vulture	121	3	..	29	1	20	2	5	4	1	18	4	8	9	16	1	..

Black Vulture	46	1	2	13	8	6	5	1	1	..	4	..	3	2	..	..	..
Swallow-Tailed Kite	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Sharp-shinned Hawk	9	..	..	..	..	4	1	..	..	..	3	..	..	..	1	..	..
Cooper's Hawk	5	..	..	..	..	2	..	..	..	1	..	..	1	1	..	..	..
Red-tailed Hawk	34	2	..	3	2	2	..	4	1	5	1	1	5	8	1	..	..
Red-shouldered Hawk	25	1	1	11	..	1	1	1	1	..	..	2	1	4	1	..	..
Broad-winged Hawk	7	..	..	..	..	..	..	..	..	..	1	3	..	..	2	..	1
Marsh Hawk	4	..	..	..	..	..	..	..	1	..	1	..	..	1	1	..	..
Osprey	33	1	19	7	..	2	1	..	..	..	..	.	..	2	..	..	1
Pigeon Hawk	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Sparrow Hawk	8	..	1	..	..	1	..	..	..	1	..	..	3	..	..	1	1
Bobwhite	758	65	90	16	13	105	21	50	19	27	65	89	28	98	26	2	44
Turkey	6	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	38	..	26	12	..	..	..	..	..	..	..	..	..	..	..	..	..
Sora	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Gallinule	3	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Common Gallinule	22	..	..	18	..	2	..	1	..	..	..	1	..	..	..	..	..
Am. Coot	27	..	3	10	..	3	..	10	..	..	..	..	..	1	..	..	..
Am. Oystercatcher	22	..	17	5	..	..	..	..	..	..	..	..	..	..	..	..	..
Piping Plover	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Plover	125	..	110	15	..	..	..	..	..	..	..	..	..	..	..	..	..
Wilson's Plover	27	..	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	55	..	..	..	1	36	..	1	..	1	4	6	1	3	..	..	2
Black-bellied Plover	55	..	48	7	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	5	..	..	..	..	1	..	2	..	..	2	..	..	..	..	..	..
Common Snipe	15	2	1	..	..	..	3	5	..	..	..	..	..	1	1	..	2
Whimbrel	61	..	7	54	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	64	1	14	1	..	9	2	5	4	..	..	1	9	16	2	..	..
Solitary Sandpiper	70	2	1	..	1	5	4	3	1	..	6	16	15	16	..	..	..
Willet	153	..	109	44	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Yellowlegs	36	..	21	10	1	..	3	..	..	..	..	..	..	..	..	..	1
Les. Yellowlegs	15	..	..	..	..	..	13	..	..	..	..	..	..	1	..	..	1
Knot	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Pectoral Sandpiper	5	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	15	..	4	1	..	..	..	..	..	..	..	..	7	1	..	2	..
Dunlin	228	..	125	100	..	..	3	..	..	..	..	..	..	..	..	..	..
Dowitcher	117	..	105	12	..	..	..	..	..	..	..	..	..	..	..	..	..
Semip. Sandpiper	128	.	23	100	..	..	3	..	..	..	..	..	..	2	..	..	..
Western Sandpiper	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marbled Godwit	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..

	Individual Totals	Beaufort Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Seven Springs, N. C.	New London, N. C.	Eastover, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Charlotte, N. C.	Anderson, S. C.	Greensboro, N. C.	Iredell Co., N. C.	Ashe Co., N. C.	Fayetteville, N. C.
Sanderling	16	..	15	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Bl.-necked Stilt	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl-backed Gull	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	261	23	176	28	..	25	..	..	..	..	..	..	9	..	..	..	..
Ring-billed Gull	151	9	78	12	..	..	..	..	3	..	..	..	43	6	..	..	..
Laughing Gull	125	50	39	36	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gull-billed Tern	12	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	3	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Tern	185	..	181	4	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	26	2	20	4	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	267	..	53	214	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	1193	52	53	20	32	116	15	10	27	15	172	267	98	217	48	3	58
Yellow-billed Cuckoo	45	2	3	23	2	3	1	1	..	..	1	3	..	4	..	1	1
Black-billed Cuckoo	4	..	..	..	..	..	..	..	1	..	..	..	1	1	..	1	..
Barn Owl	5	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..
Screech Owl	3	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..
Gr. Horned Owl	5	..	1	..	..	..	..	..	..	..	..	..	2	1	1	..	..
Barred Owl	26	..	2	2	..	4	..	..	..	..	10	2	1	2	..	..	3
Chuck-will's-widow	38	2	..	3	..	..	1	1	..	..	..	18	9	1	..	..	3
Whip-poor-will	65	..	..	..	..	2	..	..	..	3	4	12	..	16	28	..	..
Nighthawk	19	..	1	2	1	..	..	..	..	2	..	3	..	8	..	..	2
Chimney Swift	987	36	37	73	3	86	15	12	15	35	118	57	179	279	27	3	27
R.-th. Hummingbird	84	..	3	23	4	5	..	2	2	..	19	5	5	10	..	6	..
Belted Kingfisher	42	4	2	4	2	1	1	..	3	1	2	1	7	10	..	1	3
Yel.-sh. Flicker	358	26	72	16	2	29	3	12	4	13	13	22	30	92	4	6	14
Pileated Woodpecker	57	5	6	28	1	2	1	4	..	..	3	..	2	2	3	..	..
Red-bel. Woodpecker	254	11	22	24	6	17	4	10	4	8	37	25	9	58	4	..	15
Red-hd. Woodpecker	155	29	39	10	4	11	1	3	10	8	10	3	10	11	..	1	5
Yel.-bel. Sapsucker	4	..	1	..	..	1	..	..	..	..	..	..	1	1	..	..	..
Hairy Woodpecker	46	6	1	4	..	4	..	..	..	1	7	6	2	14	..	1	..
Downy Woodpecker	128	11	4	8	2	3	4	1	8	2	24	10	8	23	3	2	15
Red-cockaded Woodp.	13	1	..	8	..	..	..	..	..	..	..	..	..	..	..	..	4
Eastern Kingbird	385	15	38	79	9	20	24	20	13	4	50	18	22	48	6	5	14
Great Cr. Flycatcher	370	27	78	59	3	11	2	8	11	7	17	27	14	75	1	3	27
Eastern Phoebe	112	..	..	..	..	13	..	1	7	2	21	6	18	29	10	5	..
Yel.-bel. Flycatcher	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Acadian Flycatcher	108	1	1	17	5	2	2	5	7	2	21	12	4	27	..	..	2
Least Flycatcher	9	..	..	..	..	1	..	2	..	2	..	..	..	..	..	4	..

E. Wood Pewee	168	18	11	19	3	13	1	2	7	5	26	19	8	35	..	1	9
Horned Lark	64	..	..	..	..	17	..	..	..	..	..	6	1	32	2	6	..
Tree Swallow	603	..	35	341	..	6	11	..	1	..	60	72	4	61	..	..	12
Bank Swallow	4	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..
Rough-wgd. Swallow	187	20	..	10	9	23	2	5	6	15	21	9	28	17	17	..	5
Barn Swallow	394	23	112	104	2	40	4	1	..	5	54	2	2	24	5	16	..
Cliff Swallow	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Purple Martin	1010	34	105	86	3	535	6	..	..	5	33	65	..	115	..	..	23
Blue Jay	1209	61	178	73	8	164	38	10	43	25	85	109	75	218	21	19	82
Common Crow	556	35	68	28	5	83	16	10	6	9	46	45	44	93	21	20	27
Fish Crow	84	3	37	33	..	..	1	10	..	..	..	..	..	..	..	..	..
Carolina Chickadee	376	27	22	21	4	42	2	5	7	5	43	55	16	93	18	1	15
Tufted Titmouse	416	26	16	39	4	4	6	5	12	6	57	35	37	101	14	14	40
White-br. Nuthatch	73	6	..	..	1	13	1	..	..	2	23	6	5	13	1	2	..
Brown-hd. Nuthatch	110	7	31	12	4	6	1	..	..	2	5	6	12	19	..	..	11
Brown Creeper	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House Wren	80	..	..	..	0	26	..	..	3	2	8	15	2	16	..	8	..
Winter Wren	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Carolina Wren	354	29	31	49	8	61	9	10	11	4	35	11	18	40	5	2	31
Long-bil. M. Wren	9	..	4	3	..	..	..	2	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	6	..	..	2	..	4	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	1170	62	157	33	12	193	15	5	25	29	111	114	54	274	17	2	67
Catbird	352	14	7	2	1	29	4	3	8	12	38	33	33	115	4	20	29
Brown Thrasher	537	53	55	12	11	76	4	2	34	12	27	39	54	86	14	15	43
Robin	1030	24	6	..	1	236	..	..	28	60	90	145	46	316	29	8	50
Wood Thrush	612	9	18	11	5	54	3	7	14	24	59	82	31	237	7	4	47
Hermit Thrush	2	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Swainson's Thrush	52	..	..	..	..	..	..	..	..	..	1	18	6	27	..	..	..
Gray-ch. Thrush	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Veery	11	..	..	..	..	..	1	..	1	1	..	2	3	1	..	..	2
Eastern Bluebird	261	6	11	9	11	61	6	10	2	12	54	13	11	32	8	11	4
Blue-gr. Gnatcatcher	255	3	10	48	1	25	4	10	12	2	19	11	8	75	12	8	7
Ruby-cr. Kinglet	16	..	..	..	..	6	..	5	..	..	..	1	1	..	1	2	..
Water Pipit	11	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	1
Cedar Waxwing	266	6	36	..	..	20	..	..	..	2	..	62	30	70	27	..	13
Loggerhead Shrike	248	9	4	17	7	30	9	2	17	13	16	31	21	44	17	..	11
Starling	2518	76	158	29	15	253	13	5	38	195	97	152	400	854	31	17	185
White-eyed Vireo	287	11	11	113	6	20	5	25	8	5	17	17	13	29	6	..	1
Yel.-th. Vireo	167	2	5	18	6	12	..	3	12	1	16	24	5	41	12	1	9
Solitary Vireo	4	..	..	..	..	..	..	..	..	2	..	1	..	..	1	..	..

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Red-eyed Vireo	591	10	14	86	1	62	11	10	25	9	70	48	13	149	48	9	26
Philadelphia Vireo	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Warbling Vireo	4	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Bl.-and-wh. Warbler	44	..	..	..	..	3	4	3	..	2	5	6	1	5	4	5	6
Prothonotary Warbler	60	5	7	20	2	3	6	1	..	..	7	..	3	2	1	1	2
Worm-eating Warbler	6	1	..	1	..	..	..	..	..	..	2	1	..	1	..	..	..
Golden-wg. Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Blue-wg. Warbler	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Tennessee Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Orange-cr. Warbler	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Parula Warbler	279	18	12	154	17	1	4	10	4	..	4	9	..	31	2	2	15
Yellow Warbler	88	..	..	..	1	4	1	1	5	3	3	5	8	40	2	15	..
Magnolia Warbler	7	..	..	..	..	..	..	..	..	..	..	..	1	4	1	1	..
Cape May Warbler	61	..	..	..	..	..	..	1	..	..	..	46	7	6	..	1	..
Bl.-th. Blue Warbler	53	..	..	..	..	4	..	1	..	1	14	9	..	14	4	3	3
Myrtle Worbler	462	19	7	17	15	39	..	5	35	4	70	27	24	111	23	6	60
Bl.-th. Green Warbler	8	..	..	5	..	3	..	..	..	..	..	..	..	..	..	..	..
Blackburnian Warbler	3	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..
Yel.-th. Warbler	186	14	34	62	6	12	2	1	12	..	20	2	..	16	4	..	1
Chestnut-sided Warbler ...	8	..	..	..	..	..	..	..	..	..	2	..	..	2	..	4	..
Bay-br. Warbler	2	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Blackpoll Warbler	39	1	..	1	..	1	6	..	1	..	1	6	12	5	..	..	5
Pine Warbler	100	4	7	22	1	11	1	..	3	5	7	13	6	13	1	1	5
Prairie Warbler	276	43	33	7	2	21	7	1	18	3	36	21	6	43	29	..	6
Palm Warbler	2	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Ovenbird	124	10	..	..	2	..	..	1	9	2	8	18	1	63	2	4	4
N. Waterthrush	4	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	2
La. Waterthrush	23	..	..	..	..	..	1	1	1	1	6	1	7	1	1	..	3
Kentucky Warbler	44	..	7	2	..	1	..	3	8	1	3	12	..	4	3	..	..
Yellowthroat	368	15	12	16	2	66	6	1	9	2	52	40	19	102	17	1	8
Yel.-br. Chat	341	..	25	32	..	30	3	5	17	9	44	28	12	116	17	1	2
Hooded Warbler	245	13	5	67	3	7	3	10	7	3	20	13	15	47	23	1	8
Canada Warbler	3	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..
American Redstart	271	..	..	..	2	11	6	10	26	1	55	19	3	127	4	6	1

House Sparrow	3257	237	295	34	41	698	97	1	90	60	73	184	425	766	34	42	180
Bobolink	860	.	..	16	..	16	610	..	..	..	50	35	51	76	..	..	6
E. Meadowlark	1173	23	109	18	8	212	2	10	33	15	144	86	75	288	101	16	33
Red-winged Blackbird	2450	23	233	119	15	135	39	20	36	27	60	192	650	804	32	31	34
Orchard Oriole	258	25	48	40	2	38	8	8	2	5	2	14	19	21	2	..	24
Baltimore Oriole	19	..	..	..	1	2	1	..	..	..	..	1	1	9	..	2	2
Rusty Blackbird	15	..	..	..	..	..	..	..	..	..	..	2	9	1	..	..	3
Boat-tail. Grackle	176	..	136	40	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	1577	371	38	35	12	231	16	10	25	10	7	139	93	464	32	26	68
Br.-hd. Cowbird	329	29	..	..	2	99	7	..	2	..	36	21	12	76	34	10	1
Scarlet Tanager	64	..	..	1	..	..	1	1	2	..	10	10	5	33	3	3	..
Summer Tanager	297	17	28	48	8	36	7	5	11	3	28	16	11	59	..	..	20
Cardinal	1831	106	146	66	31	274	30	25	34	29	182	192	86	423	96	27	84
Rose-br. Grosbeak	13	..	..	..	..	1	2	..	1	..	3	1	1	3	..	1	..
Blue Grosbeak	203	13	3	11	2	9	3	5	1	6	17	17	52	50	2	..	12
Indigo Bunting	367	8	3	7	5	16	3	2	7	5	90	86	29	84	10	2	10
Painted Bunting	62	..	17	40	..	..	2	3	..	..	..	..	..	..	..	..	..
Purple Finch	2	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Am. Goldfinch	1093	..	20	2	4	438	35	15	6	6	142	19	36	308	29	33	..
Ruf.-sided Towhee	861	47	59	40	10	40	4	8	15	55	36	104	180	153	23	20	67
Savannah Sparrow	183	3	60	43	6	..	6	2	..	6	8	32	4	11	..	2	..
Grasshopper Sparrow	123	..	2	..	..	16	..	..	..	..	3	26	3	71	..	2	..
Seaside Sparrow	36	..	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	5	..	..	..	..	..	..	..	..	..	..	3	1	..	..	1	..
Lark Sparrow	1	..	1	..	..	..	..	..	..	..	..	..	.	..	..	..	..
Bachman's Sparrow	41	..	6	33	..	..	..	..	..	2	..	..	..	..	..	..	..
Slate-colored Junco	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Chipping Sparrow	779	26	8	22	6	163	5	2	23	3	126	55	95	158	41	16	30
Field Sparrow	316	3	11	5	..	34	5	10	6	21	17	22	92	64	14	4	8
Wh.-cr. Sparrow	7	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	4
Wh.-th. Sparrow	536	3	61	35	16	125	5	..	2	60	25	13	19	52	63	..	57
Swamp Sparrow	27	..	..	10	..	..	3	6	..	4	1	..	..	3	..	..	..
Song Sparrow	111	1	1	..	..	4	..	..	..	2	..	14	2	56	2	29	..
Number of Species	219	86	126	133	74	108	93	90	76	83	97	107	113	129	79	77	88
Number of Individuals	42791	2070	4503	3658	439	5459	1281	536	911	964	3169	3438	3636	9176	1183	580	1788

* See text for scaup species.

BACKYARD BIRDING

(Continued from Page 41)

were more faithful—they were always there. Later in the afternoon, as I watched from the student parking lot, there was a track meet about 300 feet to the right of the nest, discus throwing about 200 feet to the left, students coming and going on the walk, yet both male and female were near the nest for about a minute between 4:00 and 4:15. Members of the visiting track team were allowed to inspect the nest. I believe the young were left unattended all day, but between 5:30 and 6:15 the female again brooded the birds for short periods at short intervals—two to ten-minute periods. On this day there seemed to be less fur on the young and three open mouths could be seen.

On Friday I tried again to check the nest at thirty minute intervals. I saw the female near the nest at 12:40 and 1:30. The rest of the time there were always the protective students. When I returned to school at 5:45 the female was brooding the birds. She left and returned to the nest at much shorter intervals. I thought at times she might be feeding them, but the light was too poor to be certain. The "fur" was disappearing from the young and the shape of the black heads emerging. There was a narrow line of "fur" across the head rather like an Indian scalp lock. Eyes were closed.

Saturday was a compartively quiet day. The birds were thriving. Scalp locks seemed smaller. Eyes were partially open. From 9 to 9:45 the female followed her usual pattern of brooding the birds and leaving the nest. At 9:45 a.m. I saw the female feed the birds, and at 9:46 the male decided to accept some responsibility and fed one bird. The female fed from one to three birds each time she returned to the nest. When I returned to the parking lot in the afternoon the female was busily feeding the birds and to my surprise all three heads could be seen above the nest while they were being fed. I left the grounds at 3:10.

When I returned at 9 o'clock Sunday morning, I found the nest empty. I could not find the parent birds. The nest itself was undisturbed. I later learned from a student that the birds were gone at 4 p.m. on Saturday.

Nesting Data Requested

Please let me have any facts about the nesting of Bluebirds, Purple Martins and Cowbirds that anyone has gathered during the spring and summer months. Remember this Department depends on your letters for its existence, so write me freely of the items that have interested you. Then we can pass them on to all of our Backyard Birders.

ANNIE RIVERS FAVER, *Eastover, S. C.*

ATTENTION!

Christmas Count Compilers

The Editor is in the process of preparing mimeographed forms for compilers to use in reporting the 1963 Christmas Count. The forms will include a list of species frequently recorded on Christmas Counts in the Carolinas. It is hoped that the new system will save time for both the compilers and the Editor.

Compilers will please send a self-addressed envelope to Mrs. J. M. Potter, Jr., Box 487, Zebulon, N. C. Forms will be mailed to compilers December 1.

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Horned Grebe in Breeding Plumage.—In a fresh-water pond near Hatteras Lighthouse on the Outer Banks of North Carolina, my wife and I saw a Horned Grebe (*Podiceps auritus*) in breeding plumage April 15, 1963. This was our first sighting of this species with ear tufts and rufus neck and sides. It was the only individual of the species seen during the 4-day trip.—JACK POTTER, *Box 487, Zebulon, North Carolina, April 29, 1963*

Cattle Egret Behavior: A Jet Age Adaptation.—I would like to add my recent observation of the feeding of Cattle Egrets (*Bubulcus ibis*) to the two reports which appeared in the September 1962 issue of *The Chat* (26: 73,74).

On a stopover at Miami International Airport on March 28, 1963, I watched for more than an hour a large flock of Cattle Egrets feeding on the grass strips between the runways outside the terminal building. The air traffic there is extremely heavy and the egrets were taking full advantage of the situation. They would stand motionless until a plane was landing or taking off, obviously stirring up the insects with the exhaust air stream. They would then eat furiously until the plane taxied to a stop or was airborne. The tremendous current from the jet exhaust seemed in no way to disturb them except to cause a subsequent scramble for food. They were not closely grouped as I have observed them when feeding without the aid of livestock, but seemed to allow each other an alloted area.—MRS. ELLISON D. SMITH, *1626 Shady Lane, Columbia, South Carolina, May 30, 1963.*

Ruddy Duck Nest Found near Charleston, South Carolina.—Enforced discomfort is the usual occurrence in my hobby. A practicing oologist can't stand placidly on the bank of a pond and gaze through binoculars. He has to get his feet wet. And his knees. And his hips.

The first nest and eggs of the Ruddy Duck (*Oxyura jamaicensis*) in South Carolina were found May 8, 1963, at Magnolia Gardens through the art of wading.

On that date the water was still a bit chilly, but young Ted Beckett and I eased over the side of our boat and began plowing through the cattails and spike grass in water up to here. We were inspecting the nests of Common Gallinules, Least Bitterns and Red-wings.

I turned from a Bittern nest holding three eggs and started to make my way out of the 4½-foot high spike grass when I spied two white eggs in a dilapidated nest.

It was the Ruddy Duck nest. Close inspection, however, revealed that the nest had been abandoned and the eggs were cold. Apparently desertion had taken place several days previously because the two eggs were nest-stained on the bottom, suggesting that they had not been turned.

This species often prefers to use an old Coot nest to building one of its own. But this nest more closely resembled a last year's Gallinule nest and little or no repairs had been made by the duck. One egg was almost falling through the bottom.

The nest was 8 inches above the water with an outside diameter of 9 inches and made entirely of spike grass stems. The water was 23 inches deep at the nest, which was 15 yards in from open water and not very well concealed.

There was neither down nor any other material in the nest. The eggs, taken to establish the record, are grayish-white, finely granulated and appear large for the bird, which is usual.

This species normally lays from 5 to 11 eggs which average 2.35 to 2.50 inches long and 1.70 to 1.80 inches broad.

About a week later I found a quantity of feathers from the neck of a Ruddy in an old Gallinule nest in another section of the pond. The nest was pushed down into the water on one side, giving a hint that some predator had caught the bird. Since that time I have seen only one Ruddy in the pond.

A pair of Ruddy Ducks with young were reported seen at Bear Island refuge in June, 1959. and two pairs with five young each were seen swimming along single file on Bull's Island by E. B. Chamberlain and Robert H. Coleman on Aug. 18, 1959. *Chat* 23:87.

Chamberlain reported (*Chat* 24:97) that "several pairs" were seen with young on Bull's Island in 1960.

Now the discovery of the nest and eggs completes the establishment of the Ruddy as a new nesting species in South Carolina.—ERNEST CUTTS, *1466 S. Edgewater Drive, Charleston, South Carolina, June 18, 1963.*

Red-breasted Merganser in Summer near Winston-Salem, North Carolina.—On July 14, 1963, Ed Wolff of Bethania, North Carolina phoned me that he had captured a fish-eating duck on a fish pond about eight miles northwest of the Winston-Salem city limits. When I examined the bird, I noted that it was a female-type merganser in very poor plumage. It had a broken wing (probably due to rough handling when it was caught) and its remiges and rectrices were extremely worn. It was compared with specimens in our collections plus illustrations in various books, and was identified as a Red-breasted Merganser (*Mergus serrator*). Mr. Wolff stated that the merganser devoured large numbers of small bass and other fish stocked earlier in the pond. Although other wild ducks occasionally visit the pond, this is the first time that a merganser has been seen on it.

Since most records for this species in the Carolinas are from coastal areas and not in the summer, it seems desirable to make special note of this inland, summer occurrence. After photographing the bird, I released it on July 16 at Reynolda Lake on the Wake Forest College campus, but doubt that it could survive long in its emaciated condition.—DAVID W. JOHNSTON, *Department of Biology, Wake Forest College, Winston-Salem, North Carolina, July 20, 1963.*

Purple Gallinule Nest in Moore County, North Carolina.—On the afternoon of June 22, 1963, I drove to River Bend Ranch Pond in Moore County, about 10½ miles northeast of Southern Pines, North Carolina, to check on the birding there, and I took Jay Carter, a lad of thirteen, with me. Although short on experience, Jay has shown an amazing ability to find and identify birds.

The River Bend Pond is spring fed and set in woods with an edging grown up in bushes and weeds. About three-quarters of the surface is covered with water lilies and other types of plant growth. It empties at the upper end into Little River.

As we approached the pond we flushed some Wood Ducks, and we counted 8 young ones following a female through the water at a distance. Suddenly Jay spotted a gallinule, and I promptly stopped and set up my scope. We had a wonderful view of a Purple Gallinule (*Porphyrula martinica*) weaving in and out of the reeds some 125 feet away. In a few minutes a second one flew in and joined the first, and I had both in the scope at once. We watched them for nearly an hour, and they were truly a beautiful sight. The white under-tail areas were very prominent and seemed puffed up. We saw their red bills, tipped with yellow, and the pale cobalt frontal shields; their purplish-blue heads and the olive-green and bluish-green colors of their body plumage. In flight, their dangling yellow legs were conspicuous.

On June 24 I returned to the pond with Jay and Mr. and Mrs. Wotton. The gallinules were still present, and one of them soon flew to the spot where we had watched them on the 22nd. This time, though, it just sat in one place. Then it would stand, turn around, and sit again. I could make out a bunched up bundle of small reeds which I was positive was a nest. When the bird's head was turned sideways, I got a fine look at its reddish eye. After a while, Jay and I moved closer to it, and it flew to another part of the pond. We were not able to get closer that afternoon and had to leave.

On June 28, at 7:20 in the morning, I was again at the River Bend Pond with Jay. The gallinule was on the same bunch of reeds. We saw the other bird on a point farther back on the pond. I had permission to use a small boat tied up to a platform nearby, and, with Jay poling and me trying to help, we made our way toward the clump. The gallinule flew when we were within 25 feet of it. After much struggling with water lilies, etc., we came alongside of the clump and saw the nest in a dense mass of pickerel weeds, about one foot above the water. It was made of reed stalks, some of which had already turned brown, and there were some weed leaves tucked here and there. It held two buffy eggs, lightly dotted with brown.

I took three pictures of the nest and I have not seen them yet; but with the boat bobbing, the sun in the wrong place, and our excitement, I fear that they will not be of the best. I carefully replaced the stalks I had moved aside, and we poled back to shore and left the pond after waiting ten minutes for the gallinule to come back and settle down on the eggs again.

Our mission was accomplished. It was quite an adventure, and I am sorry that I must be away for the rest of the summer and so will not be able to follow up the egg laying or watch the chicks.—MARY KELLER WINTYEN, *280 W. New Hampshire Ave., Southern Pines, North Carolina, June 31, 1963.* (This nest in the Southern Pines area is of particular interest. The few Purple Gallinule nests recorded for North Carolina have been confined to the lower part of Craven County, as far as we know.—*Dept. Ed.*)

Black-necked Stilts Breeding Near Morehead City, North Carolina?—On Sunday, June 30, 1963, at 6 AM, Bob Thomas and I worked the North River Marsh in Carteret County, North Carolina, the same location in which we found Ruffs (*Philomachus pugnax*) last September (*Chat*, **26**:99) and Black-necked Stilts (*Himantopus mexicanus*) on two occasions last summer.

As we entered the salt marsh we were met by several pairs of Willets (*Catoptrophorus semipalmatus*) who by their actions were obviously nesting. They continuously circled us and kept up such a din in their efforts to lead us away from the area that I did not see a Black-necked Stilt that was flying in the distance. Bob remarked that he thought he saw one, but I did not get my glasses on it in time for positive identification. At the back end of the marsh there is a shallow fresh water pool, and as we approached it Bob called my attention to a stilt that was running "nervously" through the shallow water feeding and giving an alarm cry of "pleek, pleek, pleek." The bird let us approach it until we were within 100 feet as it continued to rush about and pretend to feed. After a couple of minutes a second stilt joined it and the two continued to fuss and feed in a half-hearted manner. Then they flushed and flew about two hundred yards away and started feeding along the edge of a pond. From their actions they indicated that they were nesting in the area.

Bent, in his *Life Histories of North American Shore Birds,* (Bulletin 142, 1927) describes the performance these birds went through and states that the male will attract the attention of the intruder until the female can slip off the nest. The female will then join the male and together they will fly a short distance, alight and make a pretense of feeding.—JOHN L. THOMPSON, *Rocky Mount, North Carolina, July 2, 1963.* (Black-necked Stilts have become regular breeders at several spots on the coast of both of the Carolinas in recent years [*Chat*, 21:24; 24:105; 25:17; 26:103, for North Carolina reports]. The broken-wing and/or broken-leg acts are commonplace behavior for stilts with nests in the immediate vicinity.—*Dept. Ed.*)

Black Skimmer Inland in North Carolina.—Between Seven Springs and Mt. Olive (Wayne County), North Carolina, there is an abandoned, partially water-filled sand pit which attracts many shore birds during migration and is often a haven for sea birds, blown inland by coastal storms. On July 21, 1963, a cold front passed through this area. It was accompanied by high winds and violent thunderstorms and dropped the temperature into the sixties.

On the following day, June 22, at about 8:30 in the morning, I found a Black Skimmer (*Rynchops nigra*) at rest on the sandy shore of the pit. I called Margaret Walker of Mt. Olive, and we watched the bird for about an hour. During this time it made three flights of about five minutes each, skimming over the water in typical fashion with the lower mandible cutting the water. Small fish are plentiful in the pit; so his efforts were probably successful. With my wife I checked the area again at about dusk that day and found the bird in the same place, but the next day it was gone.

This location is 60 or more air miles from the ocean. I know of no other record of the Black Skimmer so far inland in North Carolina.—RICHARD H. SILER, *Seven Springs, North Carolina, July 29, 1963.*

Chuck-will's-widow Nest in Craven County, North Carolina.—On May 14, 1963, about five miles southwest of New Bern, Craven Co., North Carolina, I flushed a large brown bird from the ground. I immediately decided it was one of the goatsuckers and as it circled and perched lengthwise on a pine limb, I saw that it was a female Chuck-will's-widow (*Caprimulgus carolinensis*). After searching the area from which the bird had flown, I found two blotched, greyish-brown eggs in a slight depression in the pine needles.

I returned to the nesting site daily, for it was within a half-mile from my home. The brooding bird could be approached to within four feet without being disturbed. As hatching time approached she would fly only about ten feet from the nest when flushed and begin what appeared to me to be a rather primative "broken wing act".

On Tuesday, May 28, I returned to the nest and noted an egg shell beside the brooding bird. I flushed her and saw two nestlings covered with light brown prenatal down. Both nestlings were banded the next day, and when I saw them again, on the following Friday, both had retained their bands. The following week-end we were out of town and when I returned to the nest on Monday both young were gone. However, it is quite possible that they left under their own power for when they were but a few hours old they were able to move around to some extent.—THOMAS A. SHERRATT, *Box 94, Rt. 3, New Bern, North Carolina, June 27, 1963.*

Wilson's Warbler at Anderson, South Carolina.—On May 11, 1963, Mr. Tedards called me out in the yard to help him identify a strange warbler which he had heard singing. He had had a glimpse of the bird and said it looked like a Wilson's Warbler. It took me some minutes to locate it although it was singing all of the time. The voice was unfamiliar to me.

I finally saw the bird in the top of a hickory tree near our back door. At first I could see only the bright yellow underparts and the olive tail. However, it finally worked down to a low branch and sat preening long enough for me to get a good look and see that it definitely was a male Wilson's Warbler (*Wilsonia pusilla*). It stayed in the same area of the yard all day. I was unable to locate it the following day, and I assume it continued its migration.

The Wilson's Warbler is considered a rare transient in South Carolina. The few published records for the western part of the state are for the month of May, as far as I know.—Adair M. Tedards, *Route 2, Brown Road, Anderson, South Carolina, May 21, 1963.*

Scarlet Tanager Nest in Eastern North Carolina.—On June 12, 1963, I observed a male Scarlet Tanager (*Piranga olivacea*) at the Cliffs of Neuse State Park in Wayne County, North Carolina. Since the normal breeding range of this species is in the western part of the state, I assumed that this was a very late transient. Later observations proved this to be a false assumption.

On June 19, I again saw a male, apparently the same bird, in the very same spot in the Park, and I continued to see it daily through June 23. I did not see it again until June 26. Finally, on June 28, I found the female—in hot pursuit of a Blue Jay. I observed both the male and female for about an hour as they moved about in the thick grove of hardwoods and pines on the edge of the main Park road. The female seemed very excited, almost constantly uttering her distinctive call. The male was very active, too, but was silent most of the time. His color was reddish-orange, instead of the usual bright scarlet. His wings and tail were jet black.

I soon discovered a nest, located in thick foliage on the horizontal limb of an oak tree, which I guessed to be theirs because of its similarity to the nest of the Summer Tanager. On two occasions a nestling's head was seen above the rim of the nest. I watched the nest for about half an hour before the female went to it. It appeared that she was feeding the young, but I could not be sure of that.

In the late afternoon of the same day I returned to the site and watched for about an hour. During this time the female went to the nest but once and stayed only for a moment. Both male and female acted very excited as they had during the morning.

The next morning, June 29, I again observed for about an hour. During this time the female was calling almost constantly. She went all about the nest but never did go to it. In the evening I went back but neither of the pair was seen and the nest was empty. Although I could not see into the nest, it was so thinly constructed I could see through the bottom of it, leaving no doubt that the nestling or nestlings were gone.—Richard H. Siler, *Silver Springs, North Carolina, July 29, 1963.* (The behavior of these birds suggests that the young were taken by a predator. *Dept. Ed.*)

Unusual Nesting Record for the Junco in Tennessee.—*Birds of North Carolina* (Pearson, Brimley and Brimley, 1959) states that Carolina Juncos (*Junco hyemalis carolinensis*) nest "above 3500 feet." It seems that they can be induced to breed lower, as we have a pair in our hillside yard on Tumbling Creek (15 miles from Erwin, Tenn., and a little less than 3000 feet). They have nested and are feeding young on our bird-feeding rock right now.

At the end of winter—in May—we were surprised that one pair did not go to Bald Mountain (1½ miles away and something over 5500 feet), which is apparently where the Carolina Juncos go from here. Instead the two birds remained near the grain and suet even though the rest of the big flock left. Evidently they decided that where there was plenty of free food was high enough.—Ernest Seeman, *Erwin, Tennessee, June 20, 1963.*

BRIEFS FOR THE FILES

Common Loon, 1 adult, 1 immature, Lake Wylie, Charlotte, N. C., May 10 and 18, Dennis Shapler *fide* Lee Jones. • **Cory's Shearwater,** 15 counted from fishing boat about 40 miles E of Georgetown, S. C., July 7, Mrs. E. D. Smith and party. • **Wilson's Petrel,** 1 followed fishing boat from 5 to 12 miles SE of Murrell's Inlet, S. C., July 6, Mrs. E. D. Smith. • **Magnificent Frigate-bird,** 1 adult male and 1 female, circled fishing boat several times at low altitude about 40 miles E of Georgetown, S. C., July 7, Mrs. E. D. Smith and party. • **Green Heron,** 1 at Morehead City, N. C., March 16, John Fussell. • **Yellow-crowned Night Heron,** 1 killed at Lake Hartwell, Anderson, S. C., May 6, Mrs. R. C. Tedards. • **American Bittern,** 1 watched in Wayne County, N. C., April 27, Richard H. Siler. • **Mississippi Kite,** 22 or more seen at Wateree State Prison Farm, Sumter Co., S. C., June 2, the J. R. Norwoods (up to 40 counted at this location in May of 1961, see *Chat,* 25:69). • **Bald Eagle,** 1 adult at Hunting Island, S. C., March 5, for the fifth consecutive year, the R. C. Tedards; 1 adult over Rocky Mount, N. C., May 18, Wayne Hawkins, Bob Thomas. • **Killdeer,** an unusually heavy passage of spring migrants at North Wilkesboro, N. C., beginning March 4, peak, 116, March 17, Wendell P. Smith. • **American Woodcock,** single birds in Charlotte, N. C., city yards, at the Norwoods', May 24; at the Edwin O. Clarksons', first half of August. • **Common Snipe,** 1 at Lake Katherine, Columbia, S. C., April 15 and May 21, Mrs. B. W. Kendall. • **Upland Plover,** 1 observed for about 10 minutes near Charlotte, N. C., April 15, Lee Jones, Julian Meadows, Dennis Shepler. • **White-rumped Sandpiper,** 4 seen May 9 and 17, in Wayne County, N. C., Richard H. Siler; 1, May 12 at Lake Katherine, Columbia, S. C., Mrs. B. W. Kendall. • **Black-necked Stilt,** at least five pairs nesting at Bodie Island, Dare County, N. C., June 15-21, Robert P. Holmes, M.D. • **Great Black-backed Gull,** 1 near New Bern, N. C., April 28, present in the area since mid-January, Robert P. Holmes, M.D. and party. • **Bonaparte's Gull,** 2 at Lake Hartwell, Anderson County, S. C., April 12, Mr. and Mrs. R. C. Tedards. • **Black Skimmer,** up to 250 wintered around Morehead City during 1962-3, John Fussell. • **Black-billed Cuckoo,** 1, Wayne County, N. C., May 9 to 14, Richard H. Siler. • **Hairy Woodpecker,** 1 at Raleigh, May 3, James F. Parnell; 1 in Charlotte, N. C. yard, June 5, the J. R. Norwoods. • **Grey Kingbird,** 2 at State Park, Hunting Island, S. C., April 21, Mr. and Mrs. R. C. Tedards. • **Cliff Swallow,** 1 near Kannapolis, N. C., April 15, Lee Jones; 1 or more, near New Bern, N. C., April 28, Robert P. Holmes and party. • **Short-billed Marsh Wren,** 1 in Wayne County, N. C., May 3, Richard H. Siler. • **Swainson's Thrush,** 1 in New Bern count area, April 28, Robert P. Holmes and party. • **Eastern Bluebird,** several young raised in box in Charlotte, N. C., yard in summer of 1963 after lapse of several years, the J. R. Norwoods. • **Cerulean Warbler,** 8—an unusually large number—at Charlotte, N. C., April 19, Lee Jones. • **Canada Warbler,** 1 at Lake Kanuga, near Hendersonville, N. C., August 7, E. Milby Burton. • **Bobolink,** 100 or more in grain field at Wilmington, N. C., May 16, Mrs. Polly Mebane; approximately 50 at Raleigh, N. C., May 3, James R. Parnell. • **Baltimore Oriole,** 1 immature, Porter's Neck Plantation, Wilmington, N. C., July 4, Mrs. K. Alexander, Mrs. Mary Urich, Mrs. Sam Earle; 1 at Raleigh, N. C., May 3, James R. Parnell. • **Rusty Blackbird,** 1 at Raleigh, N. C., May 3, James R. Parnell. • **Brown-headed Cowbird,** 1 juvenal being fed by male Rufous-sided Towhee in city yard, May 27, the J. R. Norwoods. • **Rose-breasted Grosbeak,** 1, Wayne County, N. C., April 25, Richard H. Siler.—Compiled by B. Rhett Chamberlain. *All dates 1963.*

NEWS AND COMMENTS

Dr. David W. Johnston, former editor of *The Chat*, has accepted a position with the University of Florida at Gainsville. While Carolina Bird Club members regret that Dr. Johnston has left Wake Forest College, they wish him every happiness and success in his new post.

GPO Bargains

Ducks at a Distance, a waterfowl identification guide, is the latest government publication of interest to bird watchers. Issued by the Department of the Interior's Fish and Wildlife Service, the 24-page booklet has color drawings by Bob Hines illustrating both breeding and eclipse plumages. The cost is 25¢ per copy with a quantity discount of 25% on purchases of 100 or more copies to be mailed to one address. Send orders to Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Also available from the above address is *Attracting Birds* by W. L. McAtee (15¢). First published in 1940, this booklet is still a practical guide for the attracting and feeding of wild birds.

Migration of Birds (Frederick C. Lincoln, US Govt. Printing Office, 1950) is more technical than either of the previously mentioned publications, but it is designed to be read by the average birdwatcher. Illustrated by Bob Hines, the 102-page book has maps showing typical migration routes, an index, and a 5-page bibliography. All three publications are interesting and useful to bird students, and yet they are inexpensive enough to be given to school children and new birders who request help in learning about birds.

Auklets

The July issue of *The Auk*, journal of The American Ornithologists' Union, contains several items of interest to all bird students.

In the "General Notes" Buerkle and Mansell report the first nesting of the Cattle Egret in Canada, June 1962, in the province of Ontario.

Hailman (CBC member Jack P. Hailman) reports the extension of the breeding range of the Herring Gull south to North Carolina. Two nests were noted on Gull Island in Pamlico Sound in June 1962.

In the section dealing with rare and vanishing forms, the "Report of the Committee on Bird Protection" mentions the Eskimo Curlew, which still survives. There was another sight report on the Texas Gulf Coast in the spring of 1963, and it is probable that others passed undetected.

The Hudsonian Godwit is described as "not in immediate danger," although it has long been regarded as one of our very rare shorebirds.

The Ivory-billed Woodpecker has not been studied recently, but in 1961 only five birds were reported—two pairs and one single bird.

Bachman's Warbler and Ipswich Sparrow are both described as "seriously endangered" along with the Bald and Golden eagles. Federal legislation recently passed to protect eagles has a crippling amendment which enables the governor of any state to authorize whatever "control" is necessary on Golden Eagles; however, Secretary of Interior Udall has ruled that poison and hunting from airplanes are prohibited.

Concerning the waterfowl situation, the report states that the Canadian Wildlife Service is distributing descriptive folders on Canvasbacks and Redheads, and hunters are being urged through the press, radio, and television to be particularly careful not to shoot them. (This is the right approach. Legislation alone is not enough. There must be education and a broad base of public support for the preservation of endangered species whether they are economically important like the ducks and geese or "merely" beautiful like the warblers and egrets.—*Ed.*)

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

The Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club. In addition to publishing *The Chat*, the Club also: (1) holds an annual spring business meeting and a fall dinner meeting, (2) conducts club-wide field trips to places of outstanding ornithological interest, (3) sponsors Christmas and Spring Bird Censuses by local groups, (4) encourages original research and publication, (5) aids in the establishment of local clubs and sanctuaries, (6) takes an active interest in conservation legislation, (7) cooperates with State and Federal agencies, and (8) furnishes information and speakers to interested groups whenever possible.

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The activities of the Club and the coverage of *The Chat* will grow in amount and quality as increased funds become available. Prompt payment of dues and the securing of new members are vital contributions open to everyone.

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EDITOR .... Eloise F. Potter, Box 487, Zebulon, N. C.
GENERAL FIELD NOTES .. B. R. Chamberlain, Rt. 2, Wadmalaw Island, S. C.
BACKYARD BIRDING .... Annie R. Faver, Rt. 2, Eastover, S. C.
DISTRIBUTION MANAGER .... Harry T. Davis, N. C. State Museum, Raleigh, N. C.

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Cover Photo—A Cattle Egret chick weighs in. Photographed by Jack Potter at Battery Island, N. C., June 1963. Related article on page 65.

EDITORIAL

It is with great pleasure that we call your attention to the reorganization of the staff of *The Chat.* Last issue found us with a new Editor, and next issue will mark the beginning of our twenty-eighth year of publication; so this seems an appropriate time to bring new members to the staff.

Mrs. Annie R. Faver will continue editing Backyard Birding, which will undoubtedly please her many loyal readers. Rhett Chamberlain will continue as editor of the General Field Notes, a job he has handled with great efficiency and good judgment for nearly fourteen years. It was the efforts of these two fine department editors which made possible the remarkably smooth transition from one Editor to another.

To advise the Editor on scientific questions and to write, solicit and review papers, particularly those of a technical nature, we have an Editorial Board composed of three men, perhaps the three most responsible, along with Dr. John Grey, for making the CBC bulletin what it is today. Dr. Thomas L. Quay, a former editor of *The Chat* and a professor of Zoology at N. C. State, was one of the first people to offer his assistance. Having contributed to *The Chat* since his undergraduate days, Dr. Quay is eager to see both the bulletin and the club grow in size and influence. Dr. Charles H. Blake, another former editor of *The Chat,* is a distinguished ornithologist. His interests in the field are so varied that he will surely be able to enlighten the Editor on any subject referred to him. The third member of the board is the Field Notes Editor, Mr. B. R. Chamberlain, an amateur ornithologist in the very finest sense of the word.

As Contributing Editors we are fortunate to have four nationally recognized naturalists. Author John K. Terres is General Editor of the Lippincott Nature Books. A former editor of *Audubon Magazine* and the author of several successful books, Mr. Terres is a frequent contributor to numerous publications both popular and scientific. Nature photographer Jack Dermid is now teaching at Wilmington College and reports that he has little time for his camera at present. A full-page color picture of a Least Bittern taken by Mr. Dermid appears in *The Birds,* by Roger Tory Peterson, a new book reviewed in this issue. Artist John Henry Dick has prepared seven lovely drawings for *The Chat,* one of which heads the General Field Notes section in this issue. Mr. Dick is perhaps best known for his beautiful paintings and drawings in *The Warblers of America,* which was edited by the late Ludlow Griscom and a distinguished South Carolinian, Alexander Sprunt, Jr., our fourth Contributing Editor. Mr. Sprunt is a popular Audubon Screen Tour lecturer and a frequent contributor to several natural history publications.

As Associate Editors we have six versatile people whose names are familiar to nearly all *Chat* readers. Dr. Thomas W. Simpson is a Winston-Salem physician who finds time in his busy schedule for serious amateur ornithology. Mrs. Kay Sisson, a former editor of *The Chat,* is now serving as CBC secretary. James F. Parnell, a graduate student at N. C. State, illustrated and co-authored a very interesting paper on Barn Swallows which appears in this issue. Mrs. Doris Hauser of Fayetteville writes a column for her local paper, and her contributions to *The Chat* and other journals are invariably outstanding. She is best known for her study on sun-bathing in birds. Charleston newspaperman Ernest Cutts is primarily interested in oölogy, a field generally neglected by amateurs today. Mrs. Adair Tedards is a very capable amateur observer-writer as proved by her paper on Barn Owls which was published in *The Chat* last March.

Those who do the writing and illustrating are dependent upon another member of the staff, Harry Davis of the N. C. State Museum, who maintains the mailing list and gets each issue to the post office.

Now you have met our staff as listed on the masthead, the people who have accepted responsibility for making the CBC bulletin an attractive publication of both popular interest and scientific value. Unlisted but still very much a part of the team are the hundreds of members who send in their observations regularly and accurately. While *The Chat* welcomes and needs the support of professional biologists, writers, artists and photographers, it is still dependent upon each CBC member to contribute as often as possible according to his own talents and scientific knowledge.

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THE NESTING STATUS OF THE BARN SWALLOW IN THE SOUTHEASTERN UNITED STATES, WITH SPECIAL REFERENCE TO WAKE COUNTY, NORTH CAROLINA

James F. Parnell, Thomas L. Quay and Allan Griggs

Bird populations are constantly in a state of flux. Distributions shift in response to various environmental and population changes. The Barn Swallow is one of the species undergoing current geographic extension, spreading southward in its nesting range in the southeastern United States.

The Check-list of the American Ornithologists' Union (1957) records the Barn Swallow nesting southward along the Atlantic coast to southern North Carolina, casually to southeastern Georgia, and inland to central Virginia and northwestern North Carolina. This species nests locally in North Carolina both on the coast and in the mountains (Pearson *et al*, 1959). Intensive observations by the present authors, since 1957, substantiate the nesting of Barn Swallows in numbers along the immediate vicinity of the coast of North Carolina, from Bodie Island to Southport. They nest in small numbers southward to Cape Romain (Sprunt and Chamberlain, 1949), Folly Beach (Blitch, 1958) and Edisto Beach (Chamberlain, 1961), South Carolina. Two adults and a fully fledged immature bird were reported on the southern Georgia coast at St. Marys in July of 1961 (Chamberlain, 1961).

These records indicate a definite range extension along the coast south of North Carolina over the past few years. The increase of the coastal population in North Carolina during the same period and the successive nestings observed at Folly Beach indicate that the extension is continuing.

Somewhat less intense but following the same trend has been the southward movement of nesting Barn Swallows in the mountains of the southeast. Brown (1952) found Barn Swallows not uncommon in Watauga County, North Carolina, during the period from 1908 to 1920. He also found nests there in 1944 and during the period from 1948 to 1952. Chamberlain (1952, 1953) recorded nests near Roaring Gap in Alleghany County in 1952 and near Blowing Rock in Watauga County in 1952 and 1953. Farther southward, Gage (1961, 1962) found single nests in Oconee County in northwestern South Carolina in 1961 and 1962. Several nesting records have been reported from the mountain counties across the northern border of Georgia (Bell, 1959; Cooke and Snow, 1963; Hamilton, 1962, a and b; Mellinger, 1963; and Stevenson, 1957). Four of the above records were reported in 1962 or 1963. In addition, there is one published report of Barn Swallows nesting in the Piedmont of Georgia in Harris County (Whiteman, 1963). These reports indicate a nesting population of Barn Swallows throughout the mountain counties of Georgia.

The Barn Swallow has thus occupied the mountains and coastal plain of North Carolina for many years, but has only recently begun extending both arms of its distribution in a more southerly direction. Correlated with this movement have come the first reports of nesting from the Piedmont. Chamberlain (1958) reported three active nests found by John Trott in Stanley County, in the central Piedmont of North Carolina, and the follow-

Barn Swallow at nest located in the boat house at Lake Johnson, Wake County, N. C. (Photo by James F. Parnell)

ing year a small colony of four nests was found by Miss M. K. Wintyen (1959) at Southern Pines, along the lower edge of the North Carolina Piedmont.

In April, 1961, a pair of Barn Swallows was discovered nesting under a boat house at Lake Johnson, just south of Raleigh, at the eastern edge of the Piedmont. In 1962, four pairs of Barn Swallows nested beneath the same boat house. In addition, eleven nests were found under a bridge across an arm of Lake Benson, ten miles southeast of the Lake Johnson site. These nests were not found until 4 August, at which time four were active. The others appeared fresh and no birds were seen here in 1961. Apparently the seven empty nests were first nesting attempts while the four active ones in August represented second attempts. At least thirty adults and immature birds were flying around the bridge on 4 August. Further extensive searching throughout Wake County in 1962 failed to show additional nests.

On 25 May 1963, two nests were again found at the Lake Johnson boat house. A third nest was located about 300 yards away beneath the walkway of the overflow structure. On 18 June 1963, a check of the Lake Benson site revealed fifteen nests. Four were active, two were being constructed and nine were fresh but empty. The few nests that remained from 1962 were readily distinguishable from the new nests.

Further expansion of the Wake County population was discovered on 7 June 1963, when two pairs of Barn Swallows were reported nesting on the rafters of a barn on the North Carolina State College Animal Husbandry Farm, two miles west of Raleigh. Then on 25 June 1963, a single nest was found beneath a new concrete overpass bridge crossing U. S. Highway 1 in southwest Raleigh.

Thus, in Wake County, along the eastern edge of the Piedmont of North Carolina, the known nesting population of Barn Swallows grew from one nest found in 1961 to fifteen nests found in two localities in 1962 and twenty nests discovered in four localities in 1963.

Nesting success was high in that part of the Wake County population for which complete data were available. Of seven nests observed at Lake

Johnson, over the three-year period of nesting, six were successful in fledging young. Of ten nests with known completed first clutches over the three-year period, the average clutch size was 3.9. This compares favorably with an average clutch size of 4-5 reported by Bent (1942). The high ratio of successful nests to nests started seems to indicate that environmental conditions at present are not limiting and that a further expansion of the nesting populations may be expected.

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Zoology Department
North Carolina State College
Raleigh, North Carolina
14 October 1963.

The author holds a nestling White Ibis which was banded at Battery Island 24 May 1963. The White Ibis chick is distinguished from the young Glossy Ibis by the presence of white feathers on the belly and the absence of light spots on the crown and throat.

BATTERY ISLAND 1963

By David A. Adams

General Description of Activities

The status of the breeding colony of maritime birds on Battery Island, near Southport, North Carolina, has frequently been recorded in *The Chat* (e.g. Brimley, 1938; Funderburg and DePoe, 1957; Funderburg, 1960; Johnston, 1960). This year, I made five trips to the area (24 May, 1 and 15 June, 6 and 30 July) with Jack and Eloise Potter, A. M. Shaw, Jack Dermid, and J. F. Parnell, noting the general progression of nesting activities and banding as many of the young birds as possible.

Following the devastating hail storm of 16 May 1961, most of the Little Blue Herons, Snowy Egrets, and many of the Louisiana Herons formerly nesting in the heronry on the north end of Battery Island established a new colony in the small thicket of Hercules-club (*Xanthoxylum Clava-Herculis*), Red Cedar (*Juniperus virginiana*), Wax Myrtle (*Myrica cerifera*), and other shrubs at the extreme southeast corner of the island. This colony continues to thrive, and now contains nesting Glossy and White Ibises, Cattle Egrets, Black-crowned Night Herons, and a few Common Egrets as well as the original species. As there appears to still be unused nesting habitat in the colony, it will undoubtedly continue to grow in numbers of birds.

The original heronry on the north end of Battery Island continues to support large numbers of Common and Cattle Egrets, and lesser numbers of the other resident waders. With the removal of many of the smaller herons to the new colony, the high nestling mortality and the terrific vegetation damage once in evidence seems greatly lessened, and the colony now appears capable of accommodating more birds than were present last summer.

The higher sandy portions of the southern part of Battery Island, which have in past years been used by nesting Black Skimmers, American Oystercatchers, Gull-billed Terns, and Willets, supported a smaller population of those species this year than previously—probably as a result of the continued encroachment of herbaceous vegetation over the once-bare sand ridges.

CHANGES IN THE NESTING POPULATION

For several years, 30-40 immature and adult White Ibises have frequented the heronry, but apparently did not breed until this year. A single nestling White Ibis was banded 24 May, and several noticed subsequently but not banded. Probably at least six pairs of White Ibises are now breeding in both colonies.

Both Snowy Egrets and Little Blue Herons appear much reduced from former years. Funderburg and DePoe (1957) noted more than 100 Snowy Egret nests and more than 60 Little Blue Heron nests; Quay and Adams (1956) recorded 45 pairs of Snowy Egrets and 30 pairs of Little Blue Herons. This season there were less than 20 pairs of Little Blue Herons and 10 pairs of Snowy Egrets present.

Cattle Egrets continue to increase in both the north and south colony. Adults were numerous on 24 May and increased to 300-400 birds by 15 June. As this species fits into the social order of the heronry just beneath the Common Egret, and competes most severely with Snowy Egrets and Little Blue Herons, the reduction in numbers of the latter two species might well be directly attributable to competition with the aggressive Cattle Egret.

A single pair of Great Blue Herons nested on Battery Island in 1961. Of the family group, only one young appeared to survive the hail storm, and was seen in the herony several weeks following the storm. No Great Blue Herons nested there this year.

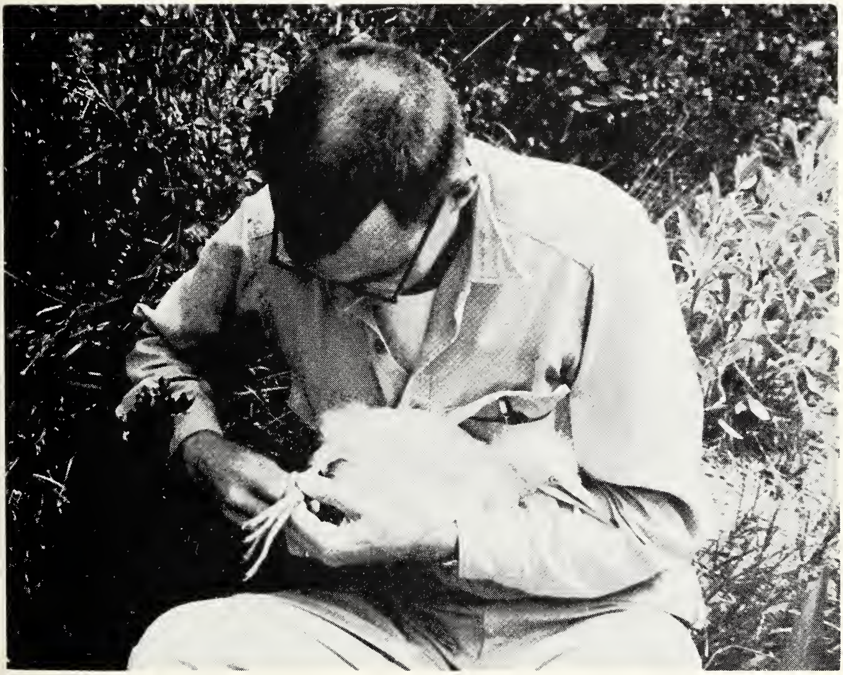
NESTING CHRONOLOGY

Wading Birds

On 24 May, about half of the nests of all species except Cattle Egrets contained eggs, most of the remainder having already hatched. The old colony was definitely farther along than the new one, and Cattle Egrets had not begun nesting in any numbers. Black-crowned Night Herons appeared to be slightly more advanced than the other species. By 15 June, most young herons were actively climbing and running about, and more frequently than not evading capture and banding. Three weeks later, most of the young birds were flying and a few nestling Cattle Egrets were observed. The peak population of nestling Cattle Egrets did not come until 30 July, by which time almost all young of all other species (except for a small number of apparent renestings) had left the heronry except for roosting.

RIGHT, ABOVE—The author measures a nestling Louisiana Heron. After being weighed each chick was measured for length of tarsus, bill, and wing from bend to tip of longest primary. Weights and measurements were carefully recorded for comparison with same data on nestlings recovered on subsequent trips.

RIGHT, BELOW—The author applies a U. S. Fish and Wildlife Service band to the leg of a nestling Common Egret, the last step in the banding operation. Nestlings were carefully returned to the same nest from which they were removed for banding. Birds large enough to leave the nest but too young to fly were returned to the general area in which they were found.
(Photos by Jack Potter)



Skimmers, Terns, and Shore-birds

A few Least Terns had begun nesting by 24 May. Three young Black Skimmers and several American Oystercatcher nests that had been destroyed by the spring tides of 23-24 May were found. A single young Willet was banded and 10-15 pairs of adults seen.

On 1 and 6 July, a few just-hatched Least Terns were found, 4-5 pairs of Gull-billed Terns were beginning nesting activities, and young Willets, American Oystercatchers, and Black Skimmers were apparent. By 30 July, all young Gull-billed and Least Terns were flying, the last few young Black Skimmers were becoming airborne, and all Willets had left the island.

NESTLING MORTALITY

Of five known broods of bandable Black-crowned Night Herons, four contained two young and one contained three. Of 36 Louisiana Heron nests, 10 contained a single young, 21 had two, and five had three young. Seven bandable broods of Little Blue Herons included three of a single young, three of two, and one of three young. Of six broods of Glossy Ibises, two contained a single young and four contained two each. As the average clutch size for all these birds is 3-4 eggs (Palmer, 1962), this represents more than 40% mortality from start of incubation to "average banding age", if the data from all species are pooled. On 1 June, four Louisiana Herons and one Glossy Ibis, banded one week previously, were found dead, apparently from natural causes. This represents an additional mortality of about 3% (based on average clutch size) from "average banding age" to independence. Although I examined every dead young bird discovered on succeeding trips, no further banded birds were found. Evidently, then, juvenile mortality is highest in the very young birds. Although these data are very crude, they represent some significant contribution to the knowledge of nestling mortality in wading birds—one of the less well-known areas of avian biology.

FUTURE PLANS

Although considerable amount of ornithological work has been done on Battery Island, and much published material is available concerning annual populations and nesting chronology, almost nothing is known about the birds' dispersal and activities during the non-nesting season. For several years, William L. Anderson, Jr. has banded on the island (Davis, 1960). This year, 297 additional birds were banded. In cooperation with the project of Lon Ellis, Merritt Island, Florida, to study the movements of Cattle Egrets, 71 young of this species were banded with orange-painted standard U. S. Fish and Wildlife Service bands on the left leg (Florida birds of this year's hatching were banded orange on the right leg). I hope all CBC members will be on the alert for these color-banded birds and will report their observations to me. In succeeding years, with more banding (and some recoveries) we may gain a much more complete insight into the lives of these very interesting species.

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N. C. State Museum
Raleigh, North Carolina
14 October 1963

One of the unusual exhibits at the Gaston Museum of Natural History is the mounted Albino Crow. In all there are 189 beautifully mounted birds, most of which were killed in accidents, presently on exhibit at the museum.

GASTON MUSEUM OF NATURAL HISTORY

By R. M. Schiele, Director

Members of the CBC are cordially invited to visit and inspect the Gaston Museum of Natural History by its Director, R. M. Schiele. A visit to the Museum will be a thrill to all interested in the field of Natural History and the story of this facility and how it came about will no doubt be interesting.

Mr. and Mrs. Schiele have worked together as Naturalists for more than 40 years during which time they amassed extensive collections of natural history materials with the idea in mind that they would give not only the valuable collections but their services without pay in the development of a Museum through which both children and adults might become better acquainted with the beautiful and wonderful world in which we live. Mr. Schiele is a former Assistant Curator, Naturalist and museum artist taxidermist of the Philadelphia Commercial Museum. Following his U. S. Army service during the First World War, he entered the professional service of the Boy Scouts of America because of the opportunity it offered in training young men in character and citizenship and especially because of its emphasis on nature.

In 1958 Mr. Schiele retired as the Scout Executive of the 11 County N. C. Council of the Boy Scouts of America with its headquarters at Gastonia. The Schieles suggested the Museum idea for the community, and a committee of outstanding men and women was appointed to study the possibilities of such a facility. In 1960 the modern Museum building was built by Gaston County and dedicated 23 July 1961. During this interval Mr. Schiele served as a Ranger-Naturalist in the Great Smoky Mountains

National Park and worked with Arthur Stupka, Chief Park Naturalist, in developing the Sugarlands Visitor Center of Natural History.

While Gaston County provided the Museum building, it was necessary for the Board of Trustees of the Museum to raise funds through public subscription to equip and operate the Museum. The Carpentry class of Gastonia's Ashley High School donated their services in building exhibit cases. Numerous donations in addition to those made by the Schieles included the John L. Beal collection of Rocks and Minerals, Butterflies, and Bird Nests and Eggs of nearly a thousand specimens.

The Museum is now one of the outstanding Natural History facilities of the South. The building is one of the most modern in the Carolinas, built so sunlight will not fade specimens and heated or cooled by electricity so that dust and moisture damage is held to a minimum. Exhibits are beautifully lighted with easily read interpretative labels. Mounted specimens are true to life examples of museum type taxidermy art. More than 5,000 specimens of mounted birds, mammals, reptiles, and fish, as well as insects, rocks and minerals, wild flowers, seashore life including shells, and American Indian artifacts and antiquities are on exhibit.

Gaston County is preparing to turn the Museum over to the City of Gastonia since the City will have funds to enlarge the present building and maintain this growing educational and cultural facility. Since the official opening of the Museum in 1961, more than 60,000 people from 40 different states and 15 foreign countries have visited the Museum. Of this number more than 20,000 school children in classes have come to the Museum for conducted tours and illustrated talks.

The Museum is open to the public every afternoon from 2:30 to 5:30, except on Mondays, and at other hours by appointment. There is no admission charge.

R. M. Schiele is an artist taxidermist and a former curator of the Philadelphia Commercial Museum. For the past 40 years Mr. and Mrs. Schiele made extensive natural history collections which have been given to the Gaston Museum. The Schieles also give their time without pay. (Photos by the Author)

BACKYARD BIRDING

ANNIE RIVERS FAVER, DEPARTMENT EDITOR

'Unhappy' Flicker

From the Log of Critter Rest, Wadmalaw Island, S. C., October 12, 1963.—This morning at the breakfast table I was provoked by the repeated shrill cry of a Flicker at the top of a column of our carport just beyond the dining room windows. It seems to me that our Flickers are always too noisy but they move about a great deal and ordinarily attract little attention. This bird remained so long at one spot, and cried so vociferously, I went out and investigated the situation.

It was perched at the top of a brick column staring into a bare corner between the ceiling and the capital of the column, and I have no doubt that it was complaining bitterly over what it saw—or, didn't see. The corner was indeed bare and the Flicker had gone there for a meal of torpid spiders and other goodies the dirt daubers had so diligently collected and sealed up in clusters of clay capsules for their offspring. For some years now, that corner and others like it in the carport had been plastered with dirt dauber nests and the Flickers have frequently raided them. Now, the painters have just taken their leave and the corners are scraped clean and freshly painted and that particular Flicker was not happy about it.—B. R. CHAMBERLAIN.

Migrants Fear Frog

The Barringtons, of Riverland Terrace, Charleston, have had many interesting reports in these pages. The latest from Mrs. Barrington is as follows:

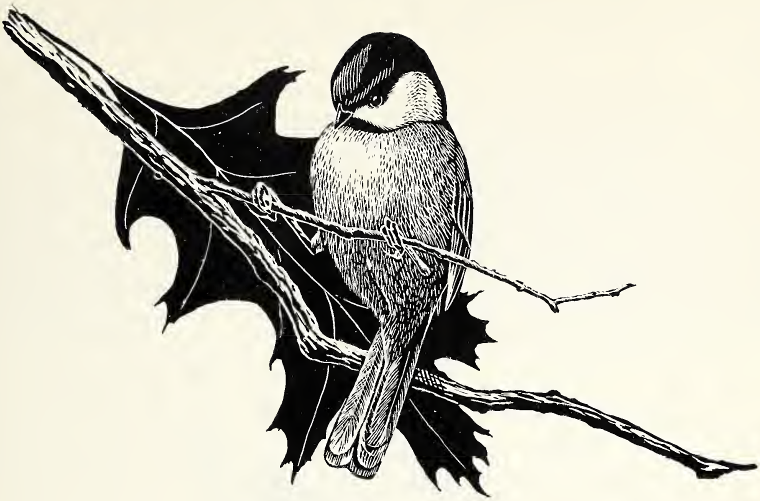
For a number of months, at the edge of the water on a bed of moss which flourishes under the drip of our birdbath, we have had a china frog, so realistic in coloring and in setting that momentarily it has "fooled" many persons. We were not prepared, however, for it to fool the birds. Our regulars—Jays, Thrashers, Cardinals, Towhees, etc.—seemed to accept its presence. But when the transients and late summer visitors began to arrive we noticed them for several days hovering near and over the bath but not using it. We suddenly wondered if the frog could be the reason for their uneasiness. We removed it and within a day these wary ones were having a good time in the bath. Redstarts, Black-and-white Warblers, Swainson's Thrush, Red-eyed Vireos, and others. Later, when these travelers have moved on, we will return the frog to its favorite spot again.

And speaking of Red-eyed Vireos, have you ever noticed how they bathe? We have never seen them walk or hop into the bath and bathe as most birds do. Instead, from a nearby perch, they plunge into the water and immediately rise to a perch on the opposite side of the bath. Sometimes the plunge is a mere dip, faster than my eye or my camera can clearly follow. This behavior, observed from season to season, is not confined to Red-eyed Vireos at our bath, for out in the swamps where the water was from one to two feet deep, we have observed them bathing in the same manner.

Lark Sparrows in South Carolina

The last weeks of summer often bring a moving about of our native song birds before the real migration of the fall begins. Small flocks are formed as the birds search the woods, fields and countryside for food and water. When the days have been as hot and dry as we have had them this past August in central South Carolina, sometimes our yards are visited by very unusual species. The spray from the hose, as we water our lawns, is very enticing to a wandering bird and usually attracts our common birds and some uncommon ones.

On the afternoon of August 22, I had turned on the sprayer on the section of our front yard between the garage and the house. Part of the water was going into a dogwood tree, and I noticed that this tree was filling with birds, one by one. I got my binoculars to see what they were and found two White-eyed Vireos, a Redstart, and the baby Carolina Wrens . . . three of them. Some of the water was also going on the drive-



way, and as I watched, the two young Brown Thrashers flew from the nearby woods and landed there. In a second or two, the wrens flew down, and another bird appeared from the woods.

My first thought was, "Why, what is a White-throated Sparrow doing here this time of the year?" Then I saw the distinctly different head pattern, and knew that I was looking at a Lark Sparrow, the first I had ever seen! I watched it hop about on the ground, picking at particles of gravel, until the dog came around the corner and the bird flew off to the woods again.

And I went indoors to consult my books: to find out where this species belonged, for while we have several small common sparrows, the Lark is not one of them.

South Carolina Bird Life calls the Lark Sparrow "accidental" in the State. One had been seen for several days in October on Bull's Island in 1943. So I had to turn to several issues of our Carolina Bird Club bulletin, *The Chat*, for my information. The dates and recordings show six occurrences from the above date to December 29, all on the coastal islands or the adjoining mainland. The species was again found at Edisto Beach on October 7, 1960, and one was seen by B. R. Chamberlain on Wadmalaw Island on August 1, 1961. In North Carolina, the species has also appeared.

Most of the records from North Carolina have been from coastal localities, but two came from Raleigh, two from Greensboro, and one from the mountain region. E. B. Chamberlain, when with the Charleston Museum, reported that Murray, in the *Checklist of the Birds of Virginia* lists the species as a rare breeder in the western part of the state. I can find no record of an inland report for South Carolina, so this could be the first. And it was a new species for my life list.

About the size of our wintering White-throats, the Lark Sparrow shows a chestnut and white head pattern with a black "whisker" mark that is conspicuous. It has pale buff wingbars and a white-bordered dark tail, shaped like a Towhee's . . . wide and rounded. The mature birds have clear breasts with one central brown breast spot, while immature birds are faintly streaked about the breasts. My newest bird book, *Birds of the East*, by Ernest S. Booth, gives the distribution of the Lark Sparrow, Eastern species, as follows: "Breeds from southern Alberta and southern Manitoba, northern Minnesota and Wisconsin, southern Ontario and New York south to southern Texas, Louisiana, central Alabama and North Carolina; winters from central Texas and the eastern Gulf Coast southward."

My Forbush and May book describes the Lark Sparrow as being "handsome, well-marked, unmistakable, and one of our finest singers". The song is said to resemble that of the Indigo Bunting. One of the names given the species in some localities is "Road-bird", from their habit of feeding near or in a drive or highway. Possibly this is one reason the bird can be so easily identified. Nests are placed on the ground or in low bushes and trees, and of course, it sings from bushes and low vegetation in its breeding territory. The usual habitat is on prairies or other open areas and the edges of these and neighboring woodlands, especially near water. Evidently the bird that came here was in search of water during the extremely dry weather. Whatever, the reason, we were glad to have another new record for Richland County.

Who, who, who?

There are two "living mouse traps" about our home in Lower Richland County, two miles north of Eastover. It is not often that a person has the opportunity of watching two Barred Owls at close quarters. I first noticed the owls early Thursday morning, August 8, when one flew across the back yard and disappeared into the deep woods at the bottom of the hill. On checking closely with my binoculars, I spotted another owl on a low limb of a large ligustrum behind the pump house. This is a quiet, shady spot, and one that is a favorite place for the wood rats and mice that are such pests. I hoped the big birds were catching these rodents. But as I watched, the owl silently dropped to the ground right at the base of the big clump of Peruvian Daffodils. Through binoculars, I watched it pull a huge earthworm out of the ground and eat it!

Sunday morning the owls were in plain view again. Finally one came to the large lower limb of the pecan tree over the birdbath on the north side of the house. We could see it plainly from the dining room, for that north wall is now all windows. We all watched the bird with much interest, the children laughing at the way it could turn its head backwards! We went to church, leaving the big owl to take its morning nap. When we returned, it was still there, and it actually seemed to be watching our movements inside the house. Fearing we would make it leave if too much activity was so close, we set the dining table on the back porch. Once one granddaughter went to see if it was still on the limb and came flying back to say the bird had moved . . . but was down on the roof of the bird feeder, even closer to the window! The owl sat there until the Armour grandchildren came down to see him.

The disturbance of people coming in upset him . . . or it . . . and it flew up to a large limb of the pecan tree at the corner of the house. So we had to go to the kitchen to watch it, this time. All the children got a good look at the owl before it glided on to the dark cool shadows of the woods.

Early this (Monday) morning I caught glimpses of both birds around the spring in the edge of the woods. I went on the back porch about eleven o'clock, and there . . . on a limb almost over the back steps . . . sat the owl. We stared at each other a moment, then it calmly shut its big dark eyes and nodded its head. As I am writing this, the owl is still there, resting quietly unless some bird comes to the feeder and spies it, and raises cain for a few seconds. The owl ignores them, and they finally go on eating and let him alone. The birds do not really seem afraid, for they go very close . . . even a hummingbird buzzed the owl.

Yesterday we had seen the owl regurgitate, and I went to see on just what the big bird had been feeding. I found a whole mass of the legs, wings and feelers of these large black beetles that cut the twigs and small limbs off of so many species of trees, especially the walnuts and pecans. My books say that these owls also do much good in controlling rabbits, squirrels, rats, mice, moles, shrews and large insects and beetles. These large owls along with the Marsh and the Red-tailed and Red-shouldered Hawks are nature's control of these rodents which if they are not thinned out become pests.

So please everyone protect the large "living mouse traps" or "beetle traps" whenever and where ever we see them, and do not shoot them. They are really friends of the farmer and of all who live in the rural sections. Beside the benefits they give in the pest-control, they are very interesting and unusual to watch.

Purple Martins: Population Explosion!

"Never before," writes Mrs. B. W. Kendall, "have I seen so many Purple Martins seeking nesting sites in the city of Columbia. They tried to build in the traffic lights at busy intersections in four sections of our city. They were successful in building nests in the lights at two places. The nests were removed by the engineers and the Martins discouraged. I saw more than fifty at one time at one intersection. But of course, no success in nesting.

"A friend who has a fish-bait pond a few miles out of the city, adjoining Fort Jackson property, had seen Purple Martins there for several years. This spring someone gave him a very large 'hen's nest' gourd. He cut a large hole in one side and had it attached to the trunk of a pine tree about fifteen feet from the ground.

"The Martins began to use the gourd immediately. How many pairs nested in it is not known, but we do know that fifteen baby Martins later sat on the doorway 'viewing the world'. They were fed, reared, and left the nest. No conflict was noticed between the parents. Next season my friend promises neat new apartment houses for the Martins."

A Word of Appreciation

This department is indebted to artist John W. Taylor for the drawings used to brighten the pages of Backyard Birding. Mr. Taylor is a regular contributor to *Wildlife in North Carolina*, published by the N. C. Wildlife Resources Commission, which kindly granted permission for use of the drawings.—*Dept. Ed.*

CHRISTMAS COUNT REMINDER

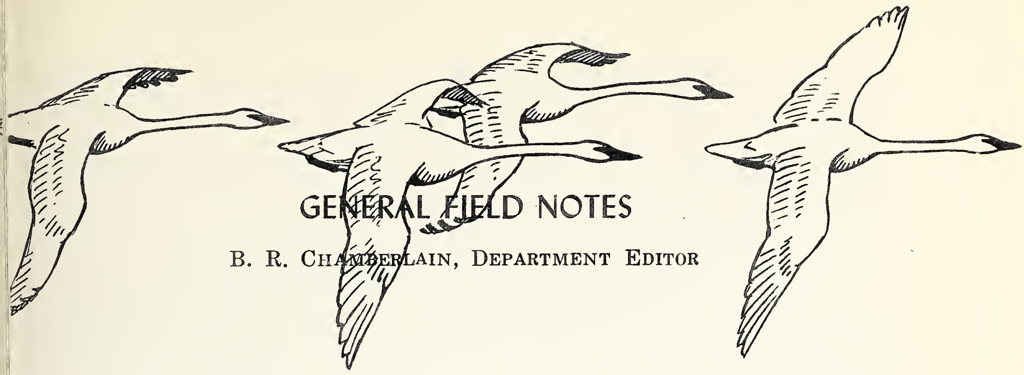
Dates for the 1963 Christmas Count have been announced as 19 December through 1 January. Compilers who have not yet received forms for reports to be published in *The Chat* are requested to send a large self-addressed envelope to the Editor immediately.

BLUEBIRD REPORT POSTSCRIPT

Many bluebird enthusiasts have expressed their appreciation for the encouraging data in the report by Charles T. Downer which appeared in the September *Chat.* One reader, Alfred W. B. Kelly of Montreal, Canada, questioned the distance of 100 feet Dr. Downer recommended between boxes. Mr. Kelly pointed out that "it is generally recognized that a male bluebird will not allow another male to approach his nesting site as close as 100 feet" and suggested that Dr. Downer may have meant to recommend 100 yards as a minimum distance between boxes.

When asked to comment on the question raised by Mr. Kelly, Dr. Downer conceded that readers may wish to change the last sentence of the next to the last paragraph of his article to read, "Boxes should be placed *not less* than 100 feet apart and not more than 7 feet high."

"Please remember that I am not an expert . . . on the nesting territories of birds . . .," Dr. Downer continued. "The fact that 100-150 and 200 yards is recommended by some bird authorities only goes to show that averages are being dealt with. Over a period of more than 50 years, I have found that bluebirds will nest in boxes that are placed even closer than 100 feet from each other. It seems to be regulated more by favorable ecological conditions than anything else. . . . If any of the readers of *The Chat* are interested enough to put up boxes and they use 100 feet as a minimum, they will be doing the bluebirds a great favor, even if the 100-foot distance does not agree with expert opinion."



GENERAL FIELD NOTES

B. R. Chamberlain, Department Editor

Some Observations Off the North Carolina Coast.—On 12 and 13 July 1963, and on 3 August 1963, I had the opportunity to make a few brief observations from a naval vessel in the vicinity of the shipping lanes along the North Carolina Coast. The times are of the twenty-four hour clock, and the distances from land are given in nautical miles as taken from the chart of the ship's navigator.

At 1700 hrs., 12 July, while 13.5 miles east of Currituck Lighthouse, Currituck County, an estimated 150 + Wilson's Petrels, 30 Laughing Gulls, and numerous Common and Royal Terns were noted. On this same date at 1930 hrs., an estimated 250 Wilson's Petrels were seen feeding in the wake of the ship at one time. At this time the vessel was 11 miles east of Oregon Inlet. During these brief observations sea conditions were slight with winds less than 8 kts. from the south.

On 13 July, at 0800 hrs., a mixed flock of Greater and Cory's Shearwaters, totaling 25 individuals, was seen 37 miles southeast of Cape Lookout. At 1200 hrs., while 67.75 miles east of Cape Fear, 30 Cory's Shearwaters and 10 Greater Shearwaters were observed, some flying and feeding and others sitting on the water. In this same general area at 1230 hrs., 6 more Cory's and 2 Greater Shearwaters were noted. A mixed flock of 18 birds of these two species was observed at 1250 hrs. in this general location. The sea conditions during the morning were slight. The wind during this time was S and SW 10 to 15 kts., the skies were clear, and the visibility was excellent.

On 3 August, from 1000 to 1105 hrs., I had some rather interesting observations when the ship ranged off of Cape Lookout ESE 37.5 to E 47.75 miles. During this hour and five minute period, the following were observed: 32 Audubon's Shearwaters, 5 Greater Shearwaters, 50 Cory's Shearwaters, 2 Wilson's Petrels, 3 Common Terns, and 2 Sooty Terns (*Sterna fuscata*).

In general the Audubon's Shearwaters were seen in pairs or singly. As the ship neared birds of this species sitting on water, they would take to the wing, often flying parallel to the ship's course, affording excellent views at close range. The Audubon's Shearwaters would approach much closer to the ship than either the Cory's or Greater Shearwaters. The Cory's Shearwaters were usually seen in small flocks. The Greater Shearwaters were usually seen associating with these groups of Cory's Shearwaters. Numerous Wilson's Petrels followed in the wake of the ship practically all the time, with the largest observed concentrations off the upper North Carolina Coast.

The two Sooty Terns, both adults, were observed flying at an estimated 50 to 60 feet above the surface of the ocean. Excepting the Common Terns, this was high in comparison to the other species observed on August 3. The birds were first noted at a distance of 300 or so yards amidship, port side, flying together in a southeasterly direction. They were observed for 3 or 4 minutes. When they crossed some distance astern of the ship I lost track of them. The tern-like flight, flight posture, and the slender wings and slim body were carefully noted. The entire dorsal portion of each bird's plumage was black; the underparts were white. There was no light collar across the back of the neck. From the distance observed other details of plumage could not be seen with my 7x35 binoculars. The characteristic flight of *S. fuscata* distinguishes it at a considerable distance from all other allies with similar color pattern, with perhaps the exception of the Bridled Tern, which is distinguished by its light collar. The A.O.U. *Check-list of North American Birds* (Fifth Ed., 1957), states that the Atlantic form of *S. fuscata,* during the nonbreeding season and during tropical storms, occurs casually along the east coast of North America as far north as Nova Scotia. There were no cyclonic disturbances reported off the North Carolina Coast immediately prior to 3 August 1963. On the day the Sooty Terns were observed, the weather was mild, the sun was shining brightly, the visibility was excellent, the sea condition was slight, and the winds were S 6 to 8 kts.

There appear to be only a few records of the Sooty Tern for North Carolina. The *Birds of North Carolina* (Rev. Ed., 1959) lists 7 records all as the result of storms. One of these was on the coast (a flock at Fort Macon, Carteret County), the others were inland. J. W. E. Joyner, (*The Chat,* 23:66, 1959) reports that he and others found a pair at a tern colony near Cape Lookout on 10 June, and again on 4 July 1959, but found no positive evidence of nesting. Harry T. Davis, who was in Joyner's party of 4 July 1959, states (*The Chat,* 25:63, 1961) that he and his banding party saw a lone bird on 23 June 1961, in the same area near Cape Lookout as the July 1959 observation.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk, Virginia. 5 October 1963.*

Cranes in North Carolina in 1957, a Correction.—The North Carolina State Museum received two heads of cranes killed on 19 November 1957 near Lennon's Marsh in Robeson County. Harry Davis in commenting on these suggests they may be the Florida Sandhill Crane (*Grus canadensis pratensis*), but adds: "Further studies may give a definite answer." (*Chat* 22:45, 1958). The answer comes through Roxie Collie Laybourne, Zoologist with the Fish and Wildlife Service in Washington, D. C., who writes:

> "Dr. John W. Aldrich at that time was doing a critical study of the sandhill cranes, *Grus canadensis,* and we kept the two North Carolina specimens so they could be included in this study. He determined the two specimens (heads only) to be the greater sandhill crane, *Grus canadensis tabida,* which is the bird that nests in Michigan."

Therefore, North Carolina records should be corrected to delete the Florida Crane (*G. c. pratensis*) which has not yet occurred in the state, and to record instead the Greater Sandhill Crane, (*G. c. tabida*).—JOHN GREY, *Box 445, Williamsburg, Virginia, 31 August 1963.*

Solitary Sandpipers in the Great Smokies.—The Solitary Sandpiper (*Tringa solitaria*), according to Arthur Stupka (*Notes of the Birds of Great Smoky Mountains National Park,* 1963), is a "scarce transient" in the Smokies with only twenty-two observations being recorded between 1935 and 1952.

Six of these sandpipers were observed and photographed at Cades Cove, Tennessee on 6 September 1963 at 3 PM. Upon entering the "Loop Road", we noticed a bright green coloring, which proved to be an algal bloom on two sewage settling ponds, and upon examination of these pools we noticed six sandpipers feeding at the edge of the more shallow one. The birds paid little attention to us, continuing their feeding and their characteristic "nodding". When flittering about, they revealed plumage of the wings and tail which confirmed their identity.—FRED L. JOHNS AND JAMES H. HUNT, *Zoology Dept., North Carolina State College, Raleigh, North Carolina, 16 September 1963.*

Knots on Mud Flats on Ocracoke Island, North Carolina.—On 14 April 1963, my husband and I observed a flock of about one hundred Knots (*Calidris canutus*) feeding greedily on the mud flats at the northern end of Ocracoke Island, N. C. Most of the birds were robin's-breast red on the throat and breast, but only a few showed any rusty color on the belly and sides. None was observed in full breeding plumage. According to *Birds of North Carolina* (revised, Davis and Wray, 1959) all known records of Knots in North Carolina have come from the beaches. The above observation indicates that the species does visit mud flats in this State as it is known to do elsewhere.—ELOISE F. POTTER, *P. O. Box 487, Zebulon, North Carolina, 29 April 1963.* (Prompted by this note we inquired of Paul W. Sykes of Norfolk, Virginia, regarding his observations on the North Carolina coast. We quote in part from his reply dated 7 October: "On September 2, 1963, W. A. Cooper and I saw 30 Knots on the mud flats at Pea Island, and on September 28, 1963, I saw 2 Knots on the flats on Bodie Island by the lighthouse. On numerous other trips to this upper Carolina coast area I have seen Knots on mud flats as well as along the sand beaches."—*Dept. Ed.*)

More Wilson's Phalaropes on the Upper North Carolina Coast.—W. A. Cooper and I saw three Wilson's Phalaropes (*Stegonopus tricolor*), all in winter plumage, on Bodie Island, Dare County, North Carolina, on 2 September 1963. This is the same location in which we found Wilson's Phalaropes on 15 September 1962 (*Chat*, 27:21, 1962). Two of these birds were feeding on the margin of a pond, and the third individual was feeding on the margin of another pond further south in the area. All three phalaropes were observed to feed in the following manner. A bird would extend the bill, head, and neck straight out from the body and downward at an angle of 40 to 45 degrees from the horizontal. Keeping the bill, head, neck, and body in this position along the same axis, it would sweep from side to side over the surface of the mud with the tip of its bill while at the same time running about in an irregular manner. The birds appeared to be feeding on insects and other small animal matter. The small head, slender neck, bright yellow legs, white throat, breast, and belly, faint dark mark through the eye, black needle-like bill, unmarked uniform dark gray back and upper wing surfaces, and the tail pattern were carefully noted.—PAUL W. SYKES, JR., *1522 Lafayette Blvd., Norfolk, Virginia, 20 September 1963.*

Herring Gull Nesting on the North Carolina Coast.—On 16 June 1963, in company with C. C. Stierly, the Walter Smiths, B. B. Warfield, and others, I visited Shell Castle and Beacon islands in Pamlico Sound, North Carolina. The usual Pelicans, Royal and Common Terns were nesting. We saw several Oystercatchers with young and one Gull-billed Tern feeding young. Several Sandwich Terns were seen. We feel that these birds were nesting, but we could not definitely prove it.

On Beacon Island we found nesting Louisiana Herons and Snowy Egrets, and a great number of nesting Laughing Gulls. The highlight of the trip was a nesting Herring Gull (*Larus argentatus*). Our attention was first attracted by the large eggs and unusual nest. We then saw a Herring Gull circling overhead and moved away some distance and watched it with binoculars and saw it return to the nest we had spotted. None of us had ever before seen the Herring Gull nesting this far south.—JAMES E. AMES, JR., *Driver, Virginia, 28 June 1963.* (The July 1963 issue of *The Auk* [80:375] records the finding by J. P. Hailman of two Herring Gull nests on Gull Island near the above site in June of 1962.—*Dept. Ed.*)

Caspian Terns at Raleigh, North Carolina.—On 14 September 1963, in mid-afternoon, four large terns were observed over Lake Raleigh, Wake County, North Carolina. From size and large red bill they were obviously either Caspian or Royal Terns. For approximately thirty minutes they worked back and forth across the lake at 25 to 50 feet up, then gradually climbed very high and drifted away to the south. Fairly careful observation was possible and revealed black cap covering the forehead, primaries dark on under side and tails forked very little, these being the field marks distinguishing Caspians from Royals as given by Peterson. The voice was a low gutteral squawk matching the recorded Caspian voice on the Peterson L. P. record. In addition, however, a distinctly different, more high pitched call was also given, though somewhat less frequent. Unfortunately the voice of the Royal Tern is not included on the record so comparison was not possible.—R. J. HADER, *313 Oakview Drive, Raleigh, North Carolina, 25 September 1963.* (The Caspian Tern is seldom reported deep inland in the Southeast. In Charlotte Dawley's *Birds of Guilford County, North Carolina* [*Chat* 18:30-40, 1954], it is listed as a rare casual and an observation by Tom Zapf on 29 April 1945 is cited.—*Dept. Ed.*)

An Unusual Concentration of Mourning Doves.—On 2 September 1963, at approximately 3:30 PM, an unusually large flock of Mourning Doves (*Zenaidura macroura*) was observed feeding in a corn field which had been cut for ensilage. The location of this observation was about five miles north of Fuquay Springs, Wake County, North Carolina. Flocks of several hundred doves at this time of year are not uncommon, however it is estimated that this particular flock contained between 1,000 and 1,500 birds, which, in the writer's opinion, is the largest single flock ever observed by him in North Carolina at this particular time of year. David L. Adams, who also witnessed the flock, was of the same opinion.

It was also noted that these birds tended to remain in a relatively compact flock when flushed. The degree of "togetherness" exhibited was far more characteristic of winter flocks than of the loose flocking usually observed in September. At the time of the observation it was speculated and commented that such large numbers and compact flocking were possibly the prelude to migration. No conclusive observations were made to substantiate this, however only a few single doves were observed in the same field when it was again checked at about 4:00 PM on 8 September 1963—six days later.—T. S. CRITCHER, *N. C. Wildlife Resources Commission, Raleigh, North Carolina, 18 September 1963.*

Late Nesting of Bluebirds at Chapel Hill, North Carolina.—On 16 August 1963, Matt L. Thompson, President of the Chapel Hill Bird Club, told me that a brood of four Eastern Bluebirds, *Sialia sialis*, left one of his bluebird nestboxes in his backyard early that morning. On 21 August 1963, at 6:30 AM, I watched a brood of three young ones leave a bluebird nestbox I had under periodic observation. It was one I had put up as an extension of a "bluebird trail" established just outside of Chapel Hill in the spring of 1963 with the cooperation of the local Boy Scouts. Checking back on my field notes, I find that the clutch of three eggs was completed on 20 July and incubation had begun. The three young hatched on 3 August, after 14 days of incubation, and the young left the nest 18 days later. In *Birds of North Carolina* (p. 285, Revised edition of David L. Wray and Harry T. Davis, 1959), the text states that "the Brimleys have seen eggs as late as July 26;" however, there is no follow-up data on the hatching date that would indicate when the eggs were laid.

It would be interesting to hear of other, possibly later, North Carolina records that may have been noted by other observers of this species. Observations of nesting bluebirds, without disturbance of the adults, can be made in bluebird nestboxes placed low on trees or fenceposts, especially in boxes designed to have a front panel that swings out for a periodic inspection and cleaning after the nesting season is over. We have used such a nestbox in establishing our bluebird trail of some 18 boxes this past spring. This greatly facilitated follow-up observations of nest-building, egg-laying, and fledging of the young. JOHN K. TERRES, *P. O. Box 571, Chapel Hill, North Carolina, 31 August 1963.*

Dickcissels at Cape Hatteras, North Carolina.—*Birds of North Carolina,* 1959 revision, states that the Dickcissel (*Spiza americana*) ". . . in the days of the early American ornithologists, was of frequent occurrence on the Atlantic coast, but later it abandoned the region almost entirely." The few recent records listed are all from Raleigh westward except one winter record from Wilmington.

On 10 September 1960 my wife and I observed a flock of Dickcissels in an area of tall grass about halfway between the Cape Hatteras light and the camping area at the south end of the cape. At any one time about 10 birds could be seen perched on the upper portion of the low growth. These were constantly dropping down to earth, to be replaced by presumably different birds hidden in the foliage.

Some readers may recognize this date 10 September 1960; for it was the eve of the great storm, Hurricane Donna, which swept over the Carolina coast with such devastating effects. At the time we saw the Dickcissels, the car radio was reporting the storm to be off Charleston and accelerating its pace. Even then the skies were cloudy and the wind blustery, so that the grassy perches of the birds swayed constantly.

We left the Cape on one of the last ferries to cross the inlet before the storm broke. There were no ferries for the Dickcissels—and I have often wondered if any of this flock of wanderers survived Hurricane Donna. Even if there were survivors, how many were in condition for the long flight to their tropical winter quarters? This suggests that perhaps many winter stragglers such as the Wilmington record mentioned above may often represent survivors from our autumn storms.—HORACE LOFTIN, *Box 246, Ft. Clayton, Canal Zone, 24 August 1963.*

Further Evidence of Red Crossbills Breeding in North Carolina.—Although the Red Crossbill (*Loxia curvirostra*) may be found irregularly in the mountains of North Carolina throughout the year, there is to date little evidence of its breeding in the state principally because the birds are so erratic. In fact, the only definite breeding record is that given by Stupka (*Auk*, 55:675, 1938): an immature bird being fed by an adult on 19 April 1938 at Indian Gap in the Great Smoky Mountains. In a recent letter to me Mr. Stupka explained that "the place was approximately ¼ mile from Indian Gap [el. 5200 feet] on the North Carolina side—near an old building . . . located along the old Indian Gap Road."

Elsewhere in the state Red Crossbills have been noted sporadically in summer at Highlands, Macon County, for many years. As early as 1941 and 1943 Henry M. Stevenson and others recorded small flocks of 3-15 birds at or near Highlands at elevations of 3800-4000 feet. In 1963 almost daily between 27 July and 5 August I regularly saw or heard from one to four crossbills flying over the Highlands Biological Station (3800 ft.). Occasionally in flight some musical notes were given in addition to the characteristic *pip-pip* notes. These birds always seemed to be going somewhere, as it were, for, except on one occasion when a bird lit briefly atop a white pine, they were invariably flying high in either a northwesterly or southeasterly direction. Since these birds could not be observed closely, it is pure conjecture to suggest that immature birds were in the small flocks.

On 27 July 1963 Tolliver Crunkleton, the C. H. Ekdahls, and I were fortunate in finding a pair of crossbills on the Flat Mountain Road, two miles NNW of Highlands. We were first attracted to a brightly-colored male as he perched on top of a white pine where he alternately delivered location notes and an abbreviated set of musical notes (song?). His reluctance to leave the area caused us to suspect the presence of other crossbills nearby, and we were delighted to see a female in a small hemlock below the male's lofty perch. She was gathering small twigs in her bill as she moved silently and slowly through the hemlock. She then flew about 25 feet behind some foliage to a point under the male, in the meanwhile getting rid of the nesting material. The male quickly joined her in the lower foliage of a white pine where the pair fed closely together. Soon they flew swiftly through the pine-deciduous forest, becoming lost to our view and hearing. Two hours later we returned to this same spot and again located the pair under practically identical circumstances. The female was gathering nesting material as the male watched from above; she got rid of the material; and the pair again fed together before flying off. Although we searched carefully through the trees where the birds had been, we never actually located the nest, and upon several subsequent visits in the next few days we could not find any crossbills at this location.

This nesting attempt not only provides additional evidence for this species' breeding in North Carolina but also extends the suspected breeding range in the state at least forty miles south of the Indian Gap locality. The Highlands observations were made possible while I was in residence at the Highlands Biological Station working under a National Science Foundation grant.—DAVID W. JOHNSTON, *Department of Biology, Wake Forest College, Winston-Salem, North Carolina, 10 August 1963.*

Snow Bunting Near Fayetteville, North Carolina.—On 20 April 1963, a Snow Bunting (*Plectrophenax nivalis*) was found feeding with Chipping Sparrows in the grass in a residential yard about seven miles from Fayetteville, Cumberland Co., North Carolina. The site is in farm land with mixed pine and oak woods nearby. The bunting remained at this location from 20 April through 27 April where it was well observed and its identity verified by Mrs. L. E. Whitfield and Henry A. Rankin. It was seen by many local members of CBC.

When on the ground the bunting appeared to be allover white except for rust on the crown, sides, wings and tail. Its eyes were dark; the bill, legs and toes were pinkish-yellow. The primaries were rusty, edged with white. A large white patch showed above the primaries, in flight. A faint dark streaking was noted on the lower back. The tail was notched, the center, rusty, the outer feathers, white.

This appears to be the first occurrence of the Snow Bunting in Cumberland County, and the *spring* appearance is of special interest. *Birds of North Carolina,* rev. 1959, shows only fall and winter dates.—MRS. J. A. SHAW, *Rt. 4, Box 140, Fayetteville, North Carolina, 15 July 1963.* (*The Chat* records a 25 April 1953 observation at Pittsboro and a 2 April 1953 observation at Elkin [17:96 and 18:84, respectively]—*Dept. Ed.*)

BRIEFS FOR THE FILES

Red-throated Loon, 1 in winter plumage seen almost daily between 5 and 15 June at Long Beach, N. C., Mrs. Robert E. McCoy and Mrs. Alvin R. Pratt. • **Horned Grebe**, 1 in breeding plumage in inlet east of Long Beach, N. C., 10-11 May and 6 June, Mrs. Robert E. McCoy. • **Cattle Egret**, some present 31 August through 8 September, in the Raleigh area, Robert J. Hader. • **Wood Ibis**, 1 flying over the highway near Pinetops, Edgecombe Co., N. C., 24 August, John L. Thompson. • **Fulvous Tree Duck**, 1 or more remained all summer at Magnolia Gardens, Charleston Co., S. C., peak population during past winter was about 33, Theodore A. Beckett, III. • **Blue-winged Teal**, 1 on Lake Tillery, Montgomery County, N. C., 3 August, Eugene B. Pond. • **Common Scoter**, 1, oil soaked, found alive but died after a few hours, at Hilton Head Beach, S. C., 7 September, Mrs. Caroline G. Newhall. • **Bald Eagle**, 1 at Craggy Garden Recreation Area, Buncombe Co., N. C., about 17 May, Mrs. Fred Conderman; 1 mature adult over Lake Wheeler, near Raleigh, N. C., 14 September, Robert J. Hader. • **Long-billed Curlew**, 1 near ferry landing, Ocracoke Island, N. C., 15 June, James E. Ames, Jr., and party. • **White-rumped Sandpiper**, a total of 110 counted on Pea Island and Bodie Island, N. C., 2 September, Paul W. Sykes, Jr. • **American Avocet**, 52 in one group on Bodie Island, N. C., 28 September, Paul W. Sykes, Jr. • **Whip-poor-will**, 1, calling at Runnymede Plantation, Charleston County, S. C., 7 October, E. Milby Burton. • **Gray Kingbird**, 1 in yard at Edisto Beach, S. C., 19, 23 and 30 May, Mrs. Paul Atwood. • **Red-breasted Nuthatch**, 2, watched at length at Hampton Park, Charleston, S. C., 8 October, Ellison A. Williams. • **Cedar Waxwing**, 2 adults feeding 3 young near Cullowhee, Jackson County, N. C., (elev. 2300 ft.) 2, 4 and 5 July, Richard H. Peake, Jr. • **Prothonotary Warbler**, a nest in a dead snag at the Lost Colony enclosure at Manteo, N. C., 17 May, Mr. & Mrs. Ralph H. Weisner. • **Black-throated Green Warbler**, 1 singing male at 12 ft. distance, at Intracoastal Waterway at Long Beach, N. C., 5 June, Mrs. Robert E. McCoy. • **Purple Finch**, 1 or more in New Bern area, N. C., 28

April, Robert P. Holmes, M.D. • **Common Redpoll**, 2 males carefully checked at 25 ft., while they drank at a heated bird bath near Wilmington, 9 February (temp. about 22°), Mr. & Mrs. N. E. Everson, **fide** Mrs. Sam Earle. • **Lark Sparrow**, 2 on Bodie Island, 2 September, and 1 immature on Pea Island, N. C., 28 September, Paul W. Sykes, Jr. • **Slate-colored Junco**, 1 in yard on Edisto Beach, 28 April through 1 May, Mrs. Paul Atwood; 1 at Charlotte, N. C., 25 April, Lee Jones. • **White-throated Sparrow**, 1 early at Raleigh, 21 September, Robert J. Hader and James Hunt—Compiled by B. R. CHAMBERLAIN. *All dates 1963.*

BOOK REVIEWS

Notes on the Birds of Great Smoky Mountains National Park. Arthur Stupka. University of Tennessee Press, Knoxville, Tenn. 1963. 242 pp. $3.00.

Here is an attractive new book which will be of considerable use and interest to residents of the Carolinas as well as other areas. Certainly no one is better qualified to write authoritatively on birds of this area than Arthur Stupka, for he has been Park Naturalist or Park Biologist since 1935. Not only are his own personal, daily observations included in the book, but he has also drawn heavily on published and unpublished accounts of dozens of other ornithologists. Altogether, the occurrence and behavior of more than 200 species of birds are discussed in the book.

By way of introductory material, Mr. Stupka briefly but accurately describes the Park area, its geology, climate, early ornithological investigations, and dominant features of plant communities, especially as they relate to altitude and life zones. It was a wise decision, I believe, to omit descriptions of the birds since these are adequately given in various field guides. Thus, for each species, the following information is presented: status in the park, altitudinal range, dates of occurrence, nesting activities, abundance, behavior, and other relevant data. Finally, there is a valuable appendix of localities (both North Carolina and Tennessee) with altitudes.

This book fills a long-standing gap, and I'm certain that anyone going "birding" in the Smokies will want to have a copy for ready reference.—DAVID W. JOHNSTON.

The Great Auk. Allan W. Eckert. Little, Brown & Company. Boston, Mass., 1963. 202 pp. $4.75.

Subtitled "a novel", this book is a story about natural history and man's influence upon it written by an amateur student of the subject for other amateurs to read and ponder. Mr. Eckert ably summarizes the known facts about the Great Auk and weaves them into a plausible story explaining the life history of the species and dramatizing the shameful manner in which it was brought to extinction. In reality the book is a plea for intelligent and timely protection of endangered species today, and as such it is to be commended.—E.F.P.

The Royal Birds. Lillian Grace Paca. Illustrations by the author. St. Martin's Press. New York, 1963. 164 pp. $7.50.

In the preface Miss Paca frankly states what is essentially the best possible review of her book: "This book is written for People to read and enjoy. Scientists may be disappointed in it, even scornful, for it is designed for the layman who merely wants to know more about [swans]." Within her wisely adopted restrictions Miss Paca handled her subject well. Anyone who admires swans—and who doesn't?—will enjoy sharing the author's enthusiasm for them. Of course there are lengthy accounts of the Mute and Whistling swans, but much space is devoted to species which will be unfamiliar to most readers, including the duck-like *Dendro cygnus* of South America. Also of interest are chapters on the care and keeping of swans and swans in myth and legend. The volume is profusely adorned by Miss Paca's graceful illustrations. A new one meets the eye almost every time a page is turned, which undoubtedly helps explain the relatively high price of a book having less than 200 pages.—E.F.P.

Birdwatching, Housing and Feeding. Walter E. Schutz. The Bruce Publishing Company, Milwaukee, Wisconsin. 168 pp. Illus. $3.75.

This revised edition of an earlier volume on *How to Build Birdhouses and Feeders* by Walter E. Schutz incorporates the best features of the first book with additional chapters on helpful information for birdwatchers.

The opening chapter of *Birdwatching, Housing and Feeding* gives a brief but fairly comprehensive picture of the present interest in birds with a discussion of methods, equipment, field guides, and areas of study.

The greatest part of the book, however, is concerned with the three major requirements for attracting birds: Food, Shelter and Water. In these chapters may be found invaluable information on preparing foods for birds of varying eating habits, and detailed instructions for building feeders, from the simplest stuffed pine cone to the most complex hopper type. The construction of bird baths, dust baths and nesting houses for many species of birds is carefully described, with charts and pictures to aid the novice. Some of the more ambitious shelters may require access to a home workshop, but there are an ample number of simple forms from which an amateur may select.

This small volume will probably be of the greatest value if it is placed on club or public library shelves where it will be available to scout groups, wood-working hobbyists and interested bird-watchers, too.—DORIS C. HAUSER

The Birds. Roger Tory Peterson and the Editors of "Life." Time, Inc. New York, 1963. 192 pp. illus. (64 in color). $3.95.

This is the twelfth volume in the "Life Nature Library." Its appeal is evidently intended to be to the general public. It is an occupational hazard of reviewers that they tend to expect books to come up to the reviewers' operating level and to be absolutely accurate in the fields of their special interest. The reader of this review is forewarned.

The book starts with a chapter on general characteristics, relationships, and evolution "from Archaeopteryx to sparrow." N.B. The jaws of *Ichthyornis* are unknown; there is no evidence that it was a seabird. Chapter 2 "The living birds" reviews the 27 admitted orders illustrated with some superb color photos. A double page painting portrays one species from each order, some are rather atypical "oh, my!" birds, such as the Red Bird of Paradise and the Pheasant-tailed Jacana. "What it takes to fly" considers not only the wings but the senses, especially sight, and the beak and legs. The upstroke of the wing almost certainly provides more lift than most statements in the literature imply. The third chapter considers food and feeding. The question "how many birds?" serves as a peg on which to hang geographical and ecological distribution as well as numbers (perhaps 20 billions in North America, north of Mexico, in late summer). Chapter 5 is "the riddle of migration" and seems to be a fair statement of what we now know. Communication both by sound and by actions is considered in the next chapter with an interesting discussion of Lek or arena mating systems. Next a chapter on the life cycle. The final chapter looks "toward a balance with man." There is no real conclusion in this chapter but does set face to face the help and the harm that man has done.

The book is excellently produced. The author has gathered facts which will be unfamiliar even to some professionals. Unlike many popular books, there is not only an index but a short, but good, bibliography of works in English. In all, this book is well-worth including in the bird-watcher's library.—CHARLES H. BLAKE

NEWS AND COMMENTS

Highlight of the CBC Autumn Field Trip at Carolina Beach 27-28 September 1963, was the sighting of about 30 Marbled Godwits during an early morning cruise on the Inland Waterway. Several godwits were seen feeding at the edge of a mud flat on the outbound trip, but most observers were reluctant to state a positive identification. On the return trip the boat stopped long enough to allow careful observation, and just as the boat began to move again, a large flock of godwits alighted among those already on the flat. Later a show of hands indicated that the Marbled Godwit was a new species for approximately half of the 79 members present.

During the Saturday night business session President Harry T. Davis expressed appreciation to the Wilmington Natural Science Club, hosts for the meeting. Arrangements were made by Vivian Bates, president, Mary Urich, "Pete" Roberts, Marie Vander Schalie, Katharine Alexander, Polly Mebane, and Dot Earle. Mr. Davis stated that the Audubon Camp Scholarships awarded annually by CBC went to Geraldine Cox, Washington, N. C., and Mr. and Mrs. L. B. George, Lake Junaluska, N. C., who shared one of the grants.

George Smith and R. H. Siler made the talley of birds seen on the field trip. There were 86 species recorded, not including a dead Woodcock found by one of the parties. Following the tally, Mrs. W. C. Mebane of Wilmington told about her recent visit in East Germany with the family of an ornithologist. Among the slides she showed there was an excellent view of a White Stork. To close the program Mr. Bates showed slides made on that infamously frigid field trip to Little River.

New Commercial Fisheries Chief

Dr. David A. Adams, formerly curator of the N. C. State Museum, has been appointed Commissioner of the State Commercial Fisheries for North Carolina. Governor Terry Sanford has indicated that he expects Adams to place new emphasis on research and development of the State's marine resources. Governor Sanford was well-advised in selecting a man of Adams' scientific and administrative ability for the difficult task of revitalizing the State's fishing industry.

New Job for CBC Treasurer

William L. Hamnett, CBC treasurer, joined the staff of the N. C. State Museum as curator effective 18 November. Hamnett was previously employed by the N. C. Wildlife Resources Commission where he frequently conducted educational programs for children and adults. The new curator knows the natural history of the State well and enjoys working with young people; therefore, it is expected that he will greatly expand the services offered to the thousands of school children who visit and write the museum each year.

Correction

Through an error made by the Editor, the volume number appeared incorrectly on the front cover of the September *Chat.* It was stated properly on the inside masthead as Volume 27.

Printer Not Changed

The fact that the cover for the September *Chat* was donated by Theo. Davis Sons, Printers, Zebulon, N. C., has led some readers to believe that this firm is now printing the bulletin. The Editor would like to make clear that the rest of the issue was printed, as usual, at the State College Print Shop in Raleigh. No commercial firm can produce a comparable quality of work for the low prices offered at the State College shop, which is operated primarily to serve the Consolidated University of North Carolina. The State College Print Shop is capable of superb craftsmanship, and your Editor has found the staff to be both competent and congenial.

CHANGE OF ADDRESS

CBC Treasurer Bill Hamnett reminds members that it is time for annual dues to be paid. Because the mailing list for THE CHAT is kept at the N. C. State Museum, he requests that renewals and new memberships be sent directly to the museum, Box 2281, Raleigh, N. C.

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Harry Davis, managing editor

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Contributors under Briefs are not indexed.

Dates are not indexed, and neither are other members of observing parties.

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Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Supporting, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

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BACKYARD BIRDING ....Annie R. Faver, Rt. 2, Eastover, S. C.
DISTRIBUTION MANAGER ....Harry T. Davis, N. C. State Museum, Raleigh, N. C.

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Cover Photo—An American Coot shows its long lobed toes in a photograph by Jack Dermid, of Wilmington, N. C.

IN MEMORIAM

DR. HARRY C. OBERHOLSER

1870-1963

The death of Dr. Harry C. Oberholser at his home at Cleveland, Ohio on Christmas Day, 1963, removed from this country one of the great ornithologists of our times. He was 93 and physically and mentally alert to within a short time of his passing. He is survived by his widow.

For nearly fifty years Dr. Oberholser was an important figure in the U. S. Biological Survey—now the U. S. Fish and Wildlife Service. His principal contributions were in the field of taxonomy. He is credited with separating and describing well over 500 species and subspecies of birds. His technical and popular publications number around 900. He wrote or participated actively in the preparation of several state books. *South Carolina Bird Life* bears a marked imprint of his hand.

Dr. Oberholser endeared himself to a large number of friends in Charleston where he was a regular spring visitor for many years, taking an active part in the Society for the Preservation of Spirituals. He was an Honorary Life Member of the Charleston Natural History Society.

B. Rhett Chamberlain
Wadmalaw Island, South Carolina
10 January 1964

DR. ARTHUR AUGUSTUS ALLEN

Almost at the moment of going to press, the editor received word of the unexpected death of Dr. Arthur Augustus Allen, 17 January 1964, at Ithaca, New York. Until the time of his passing Dr. Allen, although in his seventy-ninth year, was serving actively as Professor of Ornithology Emeritus and Honorary Director of the Cornell University Laboratory of Ornithology.

In teaching ornithology, establishing the Laboratory of Ornithology, photographing birds and other animals, recording bird songs, and writing both popular and scientific books and articles, Dr. Allen's accomplishments are sufficient to make him a legendary figure among naturalists. No other man has equaled him in encouraging professional research in ornithology while simultaneously fostering intelligent bird study among laymen.

The Cornell Laboratory of Ornithology will become, at least in spirit, a working memorial to Dr. Allen, who appreciated and enjoyed the beauty of the birds he studied. Discussing the laboratory's Sapsucker Woods sanctuary in the April, 1962, issue of *National Geographic*, Dr. Allen concluded, "It is our hope that similar projects will spring up the country over to attest the value of natural areas where the beauty, the grace, and the freedom of wild birds relax the mind and enrich the spirit."—EFP

SMITHSONIAN INSTITUTION APR 15 1964

NEWS AND COMMENTS

Spring Field Trip

Plans call for the CBC Spring Field Trip to be held at High Hampton, N. C. Club President and Newsletter Editor Harry T. Davis will be getting out a bulletin in the near future giving you all the details.

Mattamuskeet Trip

Ninety species of birds were observed by the seventy people who attended the Mid-winter Field Trip at Mattamuskeet National Wildlife Refuge 17-18 January. Among those present were three members who attended the organizational meeting in 1937: Harry Davis and Mrs. Charlotte Hilton Green, of Raleigh, and Mrs. Ruth Brown, of Washington, N. C.

CBC Emblem

At the suggestion of Mrs. M. D. Gardner, of Camp Lejeune, CBC members present for the business session at Mattamuskeet agreed to adopt a club emblem to be available either as a windshield sticker or a sew-on patch for clothing. Mrs. Gardner's proposed design shows a Yellow-breasted Chat against a green outline map of the Carolinas.

Bird Finding in the Carolinas

Mrs. Adair Tedards has prepared the first of what we hope will become an interesting series of articles on bird finding in the Carolinas. The idea is very frankly copied from the works of Dr. Olin S. Pettingill, whose books and articles on bird finding for *Audubon Magazine* are extremely popular among birders. The Editor hopes that readers who think bird finding articles should be published in *The Chat* will describe their favorite birding spots in future issues.

Credit Where Credit is Due

The Hooded Mergansers which grace the General Field Notes section this issue were drawn especially for *The Chat* by John Henry Dick.

The Cardinal heading Backyard Birding was drawn by John W. Taylor and is reprinted with the kind permission of the North Carolina Wildlife Resources Commission from its information circular "Winter Birds in Your Backyard."

Spring Count Form

Spring Count forms have been prepared and will be mailed later this month to all 1963 Spring Count compilers. New compilers are requested to notify the Editor of their need for a form. Suggested dates for spring census taking in the Carolinas are 24 April through 10 May.

Successful Collaboration

Carolina Low Country Impressions is the latest book by the writer-artist team of Alexander Sprunt Jr. and John Henry Dick. Both men have lived in the Low Country for many years and know well its people, traditions and natural history. While the book is not primarily about birds, the ornithology of Coastal Plain South Carolina is a major feature. Certainly anyone planning to visit or move to South Carolina will want to read *Carolina Low County Impressions*. People who already know and love the Low Country probably will enjoy comparing their own impressions with those of two famous naturalists.

Membership List

CBC Treasurer Bill Hamnett requests that all members who have not paid dues for 1964 do so immediately. Plans are underway for publication of a Membership List during 1964, and prompt renewal of memberships will greatly facilitate preparation of the list.

THE STATUS OF THE NORTH CAROLINA LIST

By John Grey

Someone asked rather casually how many different kinds of birds had been recorded in North Carolina. It seemed such a simple request that some of us were surprised at how many additional questions it raised. For instance, is there an official list for the State? What determined whether the bird was on the list, and who had the final say as to whether it was on or off? Is every bird that has been observed entitled to a place on the list; or, are some observations of such a nature that a bird might better be put on a hypothetical list? In fact, is there a hypothetical list? Has there been published anywhere the conditions for admission to an accepted list, and if so, how many birds may be included?

South Carolina has an official list kept by Alexander Sprunt, and on 30 August 1963 Sprunt notes 474 forms among 368 species. This list distinguishes between those forms for which there is a specimen and the bird is therefore on an accepted list, and those which had been observed but not collected (*Chat* 20:71, 1956).

Virginia also has a list kept by J. J. Murray of 455 forms. This list distinguishes between accepted records and a hypothetical list (*Raven* 34:27-28, 1963). The basis for admission to the regular list is not limited to a specimen, but also, "Certain species have been admitted on the basis of sight records, but only where in the judgment of the editor it seems thoroughly justified. One automatic rule has been followed, that a species should be admitted to the list only when it has been seen by more than one reliable observer and on more than one occasion (*Check-list of the Birds of Virginia*, Murray, 1952, p. 1).

There is no doubt that North Carolina had an official list in the 1942 edition of the *Birds of North Carolina*, Pearson, Brimley, and Brimley. The 396 forms of bird life described in the book were based on records kept over half a century by Clement S. Brimley in the Division of Entomology of the N. C. Department of Agriculture.

There is also no doubt about the conditions under which a bird record was admitted to publication; it was accepted only if C. S. Brimley was convinced the observer had seen what he claimed he saw. It was his habit to verify each observation personally by a letter or a visit, and once assured of the ability of the observer, the thoroughness of his knowledge, and the completeness of his reporting, the record was accepted and the bird added to the list. This was true even where there was no specimen available as evidence and where the observer was alone at the time.

The record of the American Flamingo (*Phoenicopterus ruber*) was such a case. I was with Brimley when he discussed with Samuel A. Walker his sight record of the birds on the beach at Pea Island and recall his questions as to the actions of the birds and the conditions under which they had been seen. He rode with Walker in his car along the beach and was not content until he discovered that Walker could distinguish Least Sandpipers from Semipalmated while driving at 35 mph and flushing small flocks of "peeps" from the mud flats. Several times we stopped to check his identifications of these, until Walker pointed out a difference in the bend of the wing of the two birds in flight.

However, Brimley was not one to accept a record merely because some able observer published it. For instance, A. C. Bent listed Audubon's Caracara (*Caracara cheriway audubonii*): "One was observed 'at close range' at Pineycreek, N. C., on February 19, 1933." (*Bull. 170 U.S. National Museum, Life Histories of North American Birds of Prey* (part 2), A. C. Bent, 1938, p. 135). Brimley checked Pineycreek, learned it was in the mountains, and knew such birds had no business in that territory. After some time he was furnished the name of the observer; he wrote the man, who gave an excellent description of the bird and its actions and suggested he had seen other rare birds. Brimley asked for full details, and on being told the man had seen Gannets in the neighborhood of Mt. Mitchell, Brimley felt he could discard the record—but all this had taken him almost a year of seeking for the facts.

Therefore, we may say that in C. S. Brimley the State had an official lister, and the criteria applied were those expressed above as satisfying Brimley that what was reported had been actually seen. Now that "C. S." is no longer with us, we may ask, who does this work now, and what are the tests?

An outstanding job in this has been done by Rhett Chamberlain as Editor of the Field Notes in *The Chat*. Before an item has appeared there it has been carefully checked—sometimes by lengthy conversations and correspondence—and he has consistently pointed out the significance of the observation and related it to any earlier observations of the bird in the Carolinas. We are much indebted to his thorough work and critical judgment, as well as to his wide knowledge; and we may hope he will continue this for a long time.

Chamberlain has sometimes said a bird was on the hypothetical list, the Cinnamon Teal (*Anas cyanoptera*) for instance. This raises the interesting question as to what birds are on such a list, and whether a bird which appeared in the 1942 *Birds of North Carolina* on a record accepted by Brimley should be officially accepted, or is open to question. That is, is there not a genuine need for clarification on such points, and for a clear statement by the Carolina Bird Club as to what birds have been accepted and those that are not yet completely acceptable?

Some such attempt was made in the 1959 revision of the *Birds of North Carolina* by David L. Wray and Harry T. Davis. The book was delayed by a strike of printers between the time type was set and the book was bound. In the meantime new species had been observed; some of these were put in an appendix; two were added on a mimeographed sheet; and some seem to have been omitted. The book was not all one had hoped for.

Something like an official list was issued by David L. Wray as an information circular of the N. C. State Museum called "Birds of North Carolina, Bird Record and Check List," which lists 415 different forms as recorded in North Carolina. This was intended more as a field work sheet, but does list Passenger Pigeon and Ivory-billed Woodpecker so that it is evidently more than a work book, and as its title suggests, it is a check-list. The printer omitted Ruddy Duck, and also four forms are included which are not now acceptable: Red-legged Black Duck, Brewster's Warbler, Lawrence's Warbler, and Southern Parula Warbler. It can therefore hardly be accepted as an official list, though a most useful list it is assuredly.

Therefore, should not the Carolina Bird Club appoint a Records Committee of at least three persons who would be charged with the responsibility of passing upon the acceptability of all North Carolina records of birds; and further, should not such a committee bring the list up to date at least every five years?

If such a Records Committee is appointed, I propose for their consideration:

I. Accept the 1942 *Birds of North Carolina* as establishing an official list through December 1941. This would involve a decision upon the two species included there without support of specimens: American Flamingo and Cinnamon Teal. Brimley accepted them on the basis of criteria which were considered valid at the time, and I should like to see us accept them also.

If we start with the 1942 book and its 396 forms we are forced to delate two forms that were acceptable in 1952, but are not included in the Fifth

Edition of 1957 of the *Check-list of North American Birds* of the American Ornithologists' Union.

1. Red-legged Black Duck (*Anas rubripes rubripes*) is now considered a color phase of the Common Black Duck. This is noted in the 1959 edition of *Birds of North Carolina* but the form is included with the data of the earlier book.

2. Southern Parula Warbler (*Parula americana americana*) is now included under Parula Warbler.

There are therefore 394 forms of bird life described in the 1942 book, and which are acceptable by official standards of the A. O. U.

II. Add two forms recorded before 1942, but not included in the book.

1. Rock Dove (*Columba livia*) was never listed by Brimley because he felt the pigeons that nested around public buildings and under bridges were escapees. However, the A. O. U. accepts this, and we should do the same. Would anyone insist upon a specimen being collected before we are sure the birds occur in North Carolina?

2. Southern Sharp-tailed Sparrow (*Ammospiza caudacuta diversa*) had been described by Louis B. Bishop from a specimen he collected at Wanchese, N. C. (*Auk* 18:269, July 1901). This was mentioned in the 1942 book, but at that time the form had not been accepted and therefore it was not counted as a separate form. The Fifth Edition accepts this, and it should now be added.

This would bring the list up to a total of 396 forms for North Carolina.

III. A dozen forms observed from 1942 through 1962, which are supported by specimens—thus using the test applied in South Carolina:

1. Cattle Egret (*Bubulcus ibis ibis*). One seen 20 April 1956 by Mrs. Raymond E. Jackson "between Wilson and Elizabeth City." A specimen is in the North Carolina State Museum, Raleigh, taken 29 April 1956 at Kelly, in Bladen County, by David A. Adams. Two nests were found on Battery Island, near Southport, 14 June 1956 by Adams and T. L. Quay (*Chat* 20:38,56). Now it is well established as a breeder also on Starvation Island, near Beaufort and ranges inland to Roanoke Rapids and Rocky Mount according to John Thompson (*Chat* 26:74).

2. Hudson Bay Canada Goose (*Branta canadensis interior*). Two specimens taken at Lake Mattakuskeet by W. Cahoon (probably 1955) are in the U. S. National Museum, as are also 11 other specimens taken between 1898-1915 by W. L. McAtee, J. Weber, and J. Riley, on Currituck Sound and at Portsmouth, N. C. (*Chat* 19:86, 1955).

3. Athabaska Canada Goose (*Branta canadensis parvipes*). A specimen is in the U. S. National Museum taken 25 November 1909 by W. McAtee on Currituck Sound (*Chat* 19:86, 1955, Robert L. Wolff).

4. Baikal Teal (*Anas formosa*). A specimen was discovered by Paul W. Sykes Jr., of Norfolk, Va., in a glass case of the Swan Island Club, Inc., and taken 9 December 1912 near Swan Island in Currituck Sound by F. W. Curtis of Boston (*Chat* 26:30-31, 1962).

5. Greater Sandhill Crane (*Grus canadensis tabida*). Two taken at Lennon's Marsh, Robeson County, 19 November 1957 by a hunter who mistook them for geese and plucked them for eating. James L. Stephens sent the heads to the State Museum, one apparently an immature (*Chat* 22:45, 1958). These were tentatively identified as the Florida Crane (*G. c. pratensis*), till John W. Aldrich of the Fish and Wildlife Service identified them as *tabida* (*Chat* 27:78, 1963).

6. Purple Sandpiper (*Erolia maritima maritima*). Robert Holmes first saw and identified three 27 December 1948 on a rock jetty at Wrightsville Beach (*Chat* 13:13, 1949). This was followed by 32 more records between then and the printing of the 1959 edition of the bird book. Two specimens were taken by John Funderburg November 1949. The birds have been

recorded from 25 August to 27 April, Wrightsville, Ft. Fisher, and Carolina Beach areas (*Birds of North Carolina,* 1959, p. 153). They may now be considered regular winter visitors around rock jetties (*Chat* **25**:21, 42, 74, 1961; **26**:49, 1962).

7. Franklin's Gull (*Larus pipixcan*). A specimen of an immature female is in the State Museum taken 13 October 1952 near Charlotte and identified by B. R. Chamberlain (*Chat* **17**:23-24, 1953).

8. Scissor-tailed Flycatcher (*Muscivora forficata*). Five records. Seen 6 April 1953 at Southern Pines by Miss Vera Chase and C. B. Chase; and 12 June 1953 Joe Jones saw one at Chapel Hill (*Chat* **17**:73, 1953). Robert Wolff collected one 27 June 1956 at Beaufort (*Chat* **20**:60, 1956). Seen 1 June 1961 at Wilmington by Greg Massey (*Chat* **25**:69, 1961) and by Kenneth C. Parkes 13 June 1960 on Pea Island (*Chat* **26**:21, 1962).

9. Black-whiskered Vireo (*Vireo altiloquus barbatulus*). A male was picked up 1 April 1960 at Wrightsville Beach by Mrs. Dot Earle. The skin is in the State Museum (*Chat* **25**:17-18, 1961).

10. Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*). Five records. Seen 3 August 1948 near Wilmington by Edna Appleberry and again 9 April 1949 at a different location in the area; both birds were males (*Chat* **17**:45-46, 1953). Female seen 11 January 1952 by Robert L. Wolff near New Holland (*Chat* **16**:26, 1952). An adult male taken at Raleigh 15 August 1952 by T. L. Quay and W. A. Goodson Jr., who put the skin in the collection at State College (*Chat* **16**:101, 1952). Paul Sykes saw three birds on Pea Island 2 September 1957 (*Chat* **22**:29, 1958).

11. Spotted Towhee (*Pipilo erythrophthalmus arcticus*). A male was trapped 14 February 1957 at Fayetteville by Mrs. Roscoe Hauser Jr.; the skin is now in the State Museum (*Chat* **21**:46-47, 1957).

12. Oregon Junco (*Junco oreganus montanus*). Seen 3 March 1960 by Mrs. Jack Potter at Zebulon, and collected by Mr. Potter on 16 March 1960 (*Chat* **24**:27-28, 1960). The skin is now in the U. S. National Museum, which traded the State Museum a pair of mounted Oregon Juncos for it. Mrs. Potter says the specimen was not a pure *montanus* but was identified as an intregrade with *shufeldti.* There is also a sight record reported at Greensboro about 15 January 1948 by George A. Smith. This was reported to Ludlow Griscom who pointed out that several individuals of this species had reached the Atlantic coast that winter (*Chat* **12**:52, 1948).

If these twelve forms are added to the 396 above we would have a list of 408—all but two authenticated by specimens.

IV. There are six birds for which there is as yet no specimen, but which would meet the requirements for inclusion in the Virginia list—having been seen by at least two competent observers, and upon more than one occasion. Is not the test of a specimen somewhat pedantic today, and a relic of the days when you "shot first and identified afterward"? Men of a former day did not have binoculars and telescopes with which to observe a bird closely, nor did they have field manuals suggesting what to look for as distinguishing marks. I therefore propose to this future committee on records these birds:

1. Ward's Heron (*Ardea herodias wardi*). One seen near Wilmington 15, 28, 29 December 1946 by Appleberry, Baker, and Hall (*Chat* **11**:1,10, 1947). John Funderburg saw one near Raleigh 23, 28 January 1959 (*Chat* **23**:62-63, 1959).

2. Eastern White-winged Dove (*Zenaida asiatica asiatica*). One seen on Pea Island 23 June 1943 by Samuel A. Walker and James Silver (*Chat* **23**:88, 1959). One seen on Pea Island 9 November 1958 by Mr. and Mrs. John R. Gatewood (*Chat* **23**:37, 1959).

3. Gray Kingbird (*Tyrannus dominicensis dominicensis*). Waters Thompson reported one at Southport 28 June 1957, and at least four were present

until 23 August (*Chat* 21:92, 1957 and 23:43, 1958). They were present at Southport again in 1958, and one was seen there by a group including John Irvine Jr. on 29 May 1959. John B. Funderburg saw one at Raleigh 16 June 1959 (*Chat* 23:67, 1959).

4. Black-billed Magpie (*Pica pica hudsonia*). One was seen at Chapel Hill 23 March 1960 throughout the afternoon by many people including Mrs. Jack Hogan, Joe Jones, Mr. and Mrs. Matt Thompson. In reporting the observation in his field notes B. R. Chamberlain noted that caged birds had escaped near Rocky Mount some years back, but accepted this bird as having come eastward under his own power (*Chat* 24:25, 1960).

5. Bullock's Oriole (*Icterus bullockii bullockii*). Three birds—male, female, and immature—seen at Morehead City 2 December 1959 by Mr. and Mrs. C. R. Devant, and later by many others. The birds stayed until 19 March 1960 (*Chat* 24:26, 1960).

6. Western Tanager (*Piranga ludoviciana*). A pair were seen June 1944 at Waynesville, Haywood County, by Mr. and Mrs. W. G. Templeton (*Chat* 21:46, 1957). A female was seen at Lake Mattamuskeet from 13 February to 8 March 1957 by William Joyner and Robert Wolff (*Chat* 21:46, 1957). A male was seen at Fayetteville 12-26 March 1957 by Doris C. Hauser (*Chat* 21:90-91, 1957).

If we add these six birds to the 408 mentioned before, we have a list of 414 different forms of bird life that are at least fairly well authenticated.

V. A Hypothetical List.

We now come to records of five birds about which some questions may be raised; at least we may question the somewhat scanty information sent in about them, and place before the Records Committee their credentials as well as our reservations:

1. Reddish Egret (*Dichromanassa rufescens rufescens*). G. H. Holmes, with his son George, saw one on a small lake near Charlotte 27 July 1947, and states that he saw it at 35 yards in good light and was familiar with the birds in Florida (*Chat* 12:52, 1948). Brimley would probably have accepted this record, but one wishes Holmes had mentioned the field marks that made him sure of his identification and anything else he observed—for without these we have no way of evaluating his observation, even when we honor his integrity.

2. White-tailed Kite (*Elanus leucurus majusculus*). Two observations have been reported. Miss Clara Knox reported that one was seen by her sister on 21 November 1946 in Davie County "flying low over a field" (*Chat* 11:15, 1947). They knew the bird had not been reported in the State, but gave no data, so that the burden of proof would fall upon the observer. Knowing Brimley's skepticism, I believe he would not have ruled out a Marsh Hawk, nor would he have let an unverified record be printed. The other one was reported by Edna L. Appleberry and Mrs. Cyril K. Bryan as seen in flight 3 January 1957 near Wilmington (*Chat* 21:70-71, 1957). It was noted that the record had been accepted by the Advisory Council, and this may close the matter; but it leaves some questions in our minds when the bird was first taken for another bird, and was only identified when it was out of sight. (Virginia had an even better record of a Mississippi Kite that stayed on the hypothetical list for years until there was a second good observation.)

3. Noddy Tern (*Anous stolidus stolidus*). One was seen by Dr. and Mrs. Will Rose on the pier at Ft. Caswell, Brunswick County, on 29 August 1949. "It was so exhausted from a storm" that it allowed them to approach very close. Reported by Mrs. Edna L. Appleberry (*Chat* 15:33, 1951). This is one of those records in which we need full data as to why it was identified as such and whether the observers were familiar with the species. Without such complete information there are many questions that arise.

4. Northern Leach's Petrel (*Oceanodroma leucorhoa leucorhoa*). John

Thompson of Rocky Mount says he has seen these several times when fishing near the Gulf Stream off Beaufort. He differentiates them by their butterfly-like flight in contrast to Wilson's which flew like swallows, and also by the fact that these birds did not have their feet protruding beyond the tail, as did some of the other petrels. (This record has not been published, nor have definite dates been given as yet.)

5. Garganey Teal (*Anas querquedula*). A male was observed near Cape Hatteras 25-31 March 1957 by many observers, and finally identified by Daniel Gibson Jr., who suggested it might have been an escaped bird since it breeds in captivity, is an Asiatic form, has not otherwise been recorded in the United States (*Chat* 21:68-70,88, 1957).

The total of all these lists would give us 414 forms that are proposed for an accepted list, plus five as candidates for a hypothetical list, for a total of 419 forms recorded in North Carolina.

SUMMARY

1. North Carolina had an official list in the 1942 edition of *Birds of North Carolina* based upon tests that satisfied C. S. Brimley.
2. There is need for a new list; but before it can be acceptable, it will be necessary to agree upon the criteria for admission.
3. The Carolina Bird Club should appoint a Records Committee to propose the basis for admission to an official list. Once the standards were agreed upon by CBC this Committee could then evaluate the published records since 1942 and set forth a list that would be decisive.
4. Such a Committee would have several lists to appraise:
    A. The 1942 bird book of 394 forms.
    B. Two forms recorded before 1942 but omitted in the book.
    C. Twelve forms recorded since 1942 and supported by specimens.
    D. Six forms recorded since 1942, for which there is no specimen, which have been seen by at least two competent observers upon more than one occasion.
    E. Five forms for which there is a good observation but which need additional support, and might be placed on a hypothetical list for the present.
5. This paper proposes a list of 414 accepted forms, and five hypothetical, for a total of 419 forms of bird life observed in North Carolina.

Box 445
Williamsburg, Virginia
8 January 1964

A Solitary Vireo visits its nest on Mt. Pisgah, June 1962.
(Photo by John Trott)

THE BREEDING BIRD CENSUS

By Wendell P. Smith

Only four localities in North Carolina have been represented in the breeding bird censuses published by *Audubon Field Notes*. [Mr. Smith modestly refrains from mentioning that in 1963 North Carolina observers contributed four of the 39 breeding-bird censuses published by *Audubon Field Notes*. Of these four reports, three were prepared by Mr. Smith, while the fourth census was taken by Mrs. A. B. Hurt of Ashe County. Nor does the author mention that his woodland swamp breeding-bird census lists the Traill's Flycatcher, a species whose nesting in North Carolina was first proved by Smith and Stevenson in 1958 (*Chat*, 25:46).—Ed.]

Taking a census is as much fun as any activity a bird student can engage in. The work requires care but no more than should be bestowed on identification. Coming at or near the close of the migration season, it furnishes an additional incentive for being in the field.

The habitat chosen should be as near uniform as possible, but climax types are hard to find now. A cultivated field, an uncultivated field, mixed woodland, or woodland in which one species is dominant, a fresh water marsh or salt water marsh, a lake with shore line, a swamp, or one of the higher mountains might be selected. A definite area is necessary, with boundaries sufficiently well marked to confine the count to the tract and make possible duplicating the census in subsequent years. For an individual, from twenty to fifty acres of woodland is probably all that could be covered adequately. Smaller areas, such as a marsh or swamp, might be selected. Fields with a smaller bird population can be censused in larger areas.

Some evidence of nesting has to be secured. This may consist of seeing the presence of a pair within the area; seeing birds with nesting material; observing adult birds with food in their bills; noting reactions to invasion of nesting territory such as scolding or sign of nervousness; and hearing calls of young in the nest, or young off the nest if they have been off only a day or two and have not had time nor strength to wander far away. Singing of the male within a circumscribed area may also be used as evidence; however, I have always liked to secure additional evidence and succeed in doing so for from ninety to ninety-five per cent of the nesting pairs.

Special care should be exercised close to the boundaries not to include birds just outside. Notice where the male sings, whether more often inside the limits than outside. Note the area where the greatest agitation over one's presence is shown. Listen for the call of nestlings, and, where possible, locate the nest. One cannot spend very much time looking for nests, however, and cover the tract.

I have found that an intensive search cannot be made of a forty to fifty acre tract at one time; so I map the area and cover it by sections, being careful not to overlap. By symbols I mark the location of the resident pairs on my map so that on subsequent occasions I will not count them again. I go over each section at least three or four times because not every nesting pair betrays its presence to the census taker on each visit to the area. The seeming reluctance of certain individuals to make their presence known is one of the chief reasons for not placing sole dependence upon song for determining the nesting population.

Some species are more difficult to secure evidence for nesting than others. The Parula Warbler does not betray its presence easily except by the regular singing of the male. Blue Jays, although noisy at other times, are very quiet while nesting. The adults may come around if one comes near the nest and peer at one quietly. Something in their manner betrays anxiety although it is not expressed by voice nor actions. The Ovenbird does not flush unless one is close to the nest, but one adult may utter a very weak note but soon becomes quiet and disappears. The Black-and-white Warbler will not flush until one almost steps on the nest. Then there is injury feigning with the bird moving away whether decoying is successful or not. The male Hooded Warbler gives the alarm note and shows agitation if one enters the vicinity of the nest. Carolina Wrens are not averse to betraying their nesting activities with loud scolding of an intruder. Vireos may or may not resent intrusion with their querulous alarm call. Some individuals do so with much less provocation than others. Yellow Warblers nearly always voice displeasure when one enters their territories.

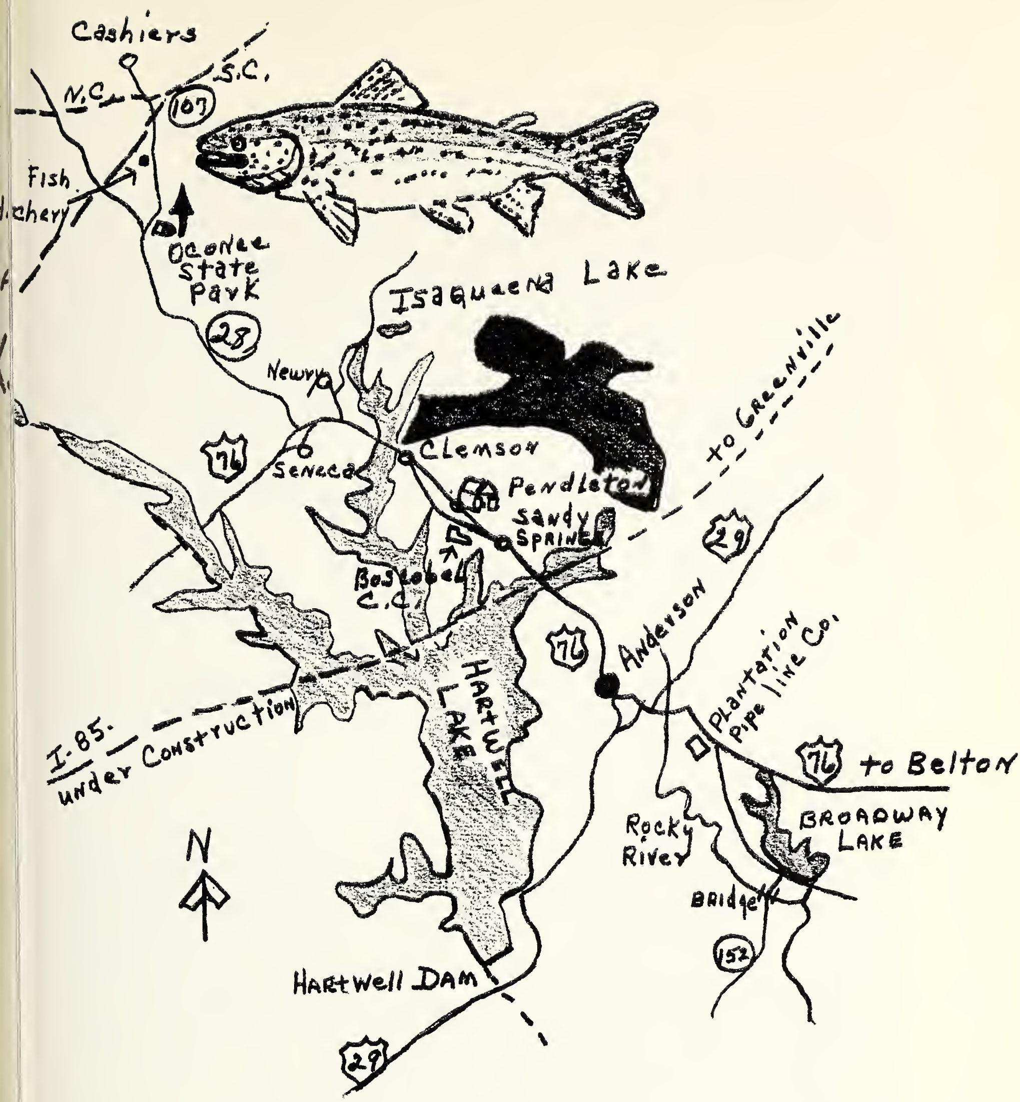
Owls and Whip-poor-wills may be included as breeding if heard within the area. Whip-poor-wills are seldom flushed and owls are not active in the daytime.

Morning is better than the afternoon. Early morning is especially good. The young are fed more often after a night's abstinence; the adults are more active soon after sunrise, the male in singing; and if nest building is going on, both individuals, if the male assists, carry more material than later in the day.

Nesting covers quite a period with species like owls nesting very early, Robins later, and the warblers later still. The greatest nesting activity occurs during the last half of May and the first half of June in my area. One may begin in March but no intensive search needs to be made until May.

Like migration observing or even a journey afield without any other purpose than to see birds, census taking has its pleasant surprises. These occur often enough to make every day of coverage thrilling with the possibility of discovery. To be sure the rare does not come often, but it does come when one "least expects it the most." This feeling adds to the pleasure of census taking, and there is also the satisfaction of learning for one's self and adding to the general knowledge of the abundance and distribution of birds.

North Wilkesboro, North Carolina
12 January 1964


Cashiers
N.C.
S.C.
107
Fish
chery
Oconee State Park
28
Isaqueena Lake
Newry
76
Seneca
Clemson
Pendleton
Sandy Springs
Boscobel C.C.
to Greenville
29
Anderson
Hartwell Lake
I-85 under Construction
Plantation Pipe line Co.
76
to Belton
Broadway Lake
Rocky River
Bridge
152
N
Hartwell Dam
29

Bird Finding:

NORTHWESTERN SOUTH CAROLINA

By Adair M. Tedards

Although birding in this upper piedmont region is by no means spectacular, there are a few spots which are perhaps worthy of a side trip or a short detour if one is in this area.

The main attraction in this area is the fantastic blackbird roost at Boscobel Country Club. The club is situated halfway between the city of Anderson and the town of Clemson. This tremendous roost has been estimated at between three and five million birds, slightly more than half of which are Common Grackles, the rest being Starlings, Red-winged Blackbirds, Cowbirds, Rusty Blackbirds, and some Brewer's.

The bamboo thickets scattered about the golf course and grounds of the club are the preferred roosting places, second choice being the pines and a few deciduous trees. The roost may be profitably visited any time from late fall until early spring when the birds scatter to their nesting grounds. The ideal time of day for a visit is approximately thirty minutes before sundown. The birds can be seen coming from all points of the compass to congregate at the roost, where there is a great deal of confusion accompanying the process of getting settled for the night. The sight is astounding and the sound is roughly comparable to standing near a very large waterfall.

A short distance from Boscobel are the towns of Pendleton and Clemson, which have some interesting old homes and buildings. Of particular interest are the old farmer's market in Pendleton and the John C. Calhoun mansion on the campus of Clemson College.

The other places worthy of mention in this locality are Hartwell Reservoir, Rocky River, Lake Isaqueena, and Oconee State Park.

HARTWELL RESERVOIR

The recent (1962) construction of Hartwell Dam on the Savannah River fifteen miles southwest of the city of Anderson has created an imposing body of water with a shore line of about nine hundred miles. The terrain surrounding the lake is of infinite variety. In some places it is wooded and hilly, in others, grassy and relatively flat. The character of the land covered by the lake has resulted in a body of water very irregular in shape with depths from a few feet to over a hundred. The lake is very wide at the dam and for several miles behind the dam, where long fingers then go out in several directions following the courses of old stream and river beds and constituting a great wealth of unexplored birding territory. The lake is dotted with islands of various sizes.

In the short time that the lake has been in existence there have been some interesting innovations in the bird life. From late July until fall migration is over and in March and April, it is possible to see a good variety of migrating shore birds. This is especially true in the backwaters where the fluctuating water level has created mud flats. Most frequently seen are the Semipalmated Plover; Killdeer; Common Snipe; Lesser and Greater Yellowlegs; Solitary, Spotted, Least, Pectoral, and Semipalmated Sandpipers. Uncommon, but also seen, is the Stilt Sandpiper. Once a Willet was observed. These places are also favorites of the herons and egrets which are visiting in increasing numbers during the post-breeding dispersal. Most common are the Little Blue and Great Blue Herons, Common Egrets, Green Herons and the Black-Crowned Night Heron. The Yellow-crowned Night Heron may be seen occasionally, while the American Bittern and the King Rail are permanent residents. The Virginia Rail has been seen during spring migration.

There has been a sharp increase in the numbers of wintering Ring-billed and Herring Gulls. The beautiful little Bonaparte's Gull was seen this past spring.

Late winter and early spring are good times for ducks, coots, grebes, and Common Loons. Frequently seen are the Redhead, Ring-necked, Scaup, Wood Duck (permanent resident), Hooded Merganser, Common Merganser, Black Duck, Mallard, Pintail, Baldpate, Shoveler, Blue-winged and Green-winged Teal, and infrequently, the Canvasback and the Ruddy Duck. Pied-billed Grebes and Coots are common. The Horned Grebe and Common Loon are sometimes seen on the deeper parts of the lake.

As indicated, the birding possibilities are relatively unexplored, but if any birders are also interested in fishing and boating, these hobbies might be combined in a worthwhile and enjoyable exploration of Hartwell Lake. The lake has ample facilities for boat launching, picnicking and camping areas are being developed rapidly, and excellent motel accommodations are close by.

ROCKY RIVER

Another spot of interest in the immediate vicinity of Anderson is a section of Rocky River, easily accessible from Anderson. The numbers and varieties of warblers and other small passerines attracted to this fairly small area during spring migration are fantastic. The very process of trying to identify every one seen and heard is dizzying.

The river itself is hardly worthy of the name, and in the section under discussion, it is quite shallow and narrow, running down a series of rocky shoals between a growth of alder, willow, and Red Birch. The soil is sandy where the river has over-flowed its banks during heavy rains. The undergrowth is mostly honeysuckle and privet. The peak of migration through this area is from the last week in April through the second week of May.

ISAQUEENA LAKE

A few miles to the north of Clemson, S. C., is Isaqueena Lake, a wildlife refuge owned by Clemson College, which has a sizeable man-made lake and extensive woodlands. This lake has long been a winter haven for ducks (mostly Black, Mallard, and Ring-necked), and also for Canada Geese. Winter also brings such visitors as the Red-breasted Nuthatch, Brown Creeper, Slate-colored Junco, Ruby- and Golden-crowned Kinglets, and Winter Wren.

OCONEE STATE PARK

Those who would like to combine birding with trout fishing might visit Oconee State Park in the extreme northwestern corner of the state. An ideal time to pursue both activities simultaneously is the month of July. The park has several good trout streams, picnic grounds, and a state fish hatchery which is quite interesting. The woodlands in the park are magnificent, having aged White Pine, Hemlock, Ash, and Tulip, with an understory of Rhododendron, Laurel, Mountain Azalea, Viburnum, Sweet Shrub, and Blueberry. While in the process of wading the streams there are excellent opportunities for observing Louisiana Waterthrushes at very close range. They are quite tame and go about their business with little concern for the human observer. When you tire of wading, and sometimes the footing is rather difficult, there are always large rocks on which you can sit and watch the bird-life on either side of the stream. In these woods and along the edges of the streams, you may see in addition to the waterthrush, the Ovenbird, Black-throated Blue, Hooded, and Black-and-white Warblers. Also present are two of the lesser known warblers, the Kentucky and Worm-eating. In addition there are the Ruby-throated Hummingbird; Acadian and Great Crested Flycatchers and Wood Pewee; Wood Thrush; Pileated, Red-bellied, Hairy and Downy Woodpeckers; White-breasted Nuthatch and companions, the Carolina Chickadee and Tufted Titmouse.

Overhead you may spot a Peregrine Falcon, and if it is early in the morning, a Barred Owl going to roost. If you are lucky you might flush Ruffed Grouse from the woods.

It is believed that the directions on the map are adequate for reaching all places mentioned, but a few additional comments may be helpful.

Hartwell Dam is located a short distance off Highway 29 south fifteen miles from the city of Anderson. The dam is visible to the right of Highway 29, and there is ample parking space with access, by foot, to the dam itself. The lake area is so vast, and there are so many secondary and primary roads which lead into it that it is impossible to mention them all. Detailed maps of the lake may be purchased at the sporting goods stores in Anderson. Maps may be ordered by mail for 50¢ (postpaid) from Dillard's Marine and Sport Center, 113 East Shockley Ferry Road, Anderson, S. C.

The section of Rocky River described is easily found if one remembers to turn right off the Belton Highway (76), at the Plantation Pipe Line Pumping Station, and right again on state road 152. There is space for parking on either end of the bridge over the river, and well marked paths lead down each side.

Backyard Birding

ANNIE RIVERS FAVER

Department Editor

Odd Cardinal at Anderson

Mrs. R. Connor Tedards wrote as follows:

On July 11, 1963, I received a call from a Mr. Hart who lives here in Anderson. He was puzzled over a bird that had been coming to his feeder. From his description, I thought it was nothing more exciting than a Summer Tanager. He did not agree and asked me to come by for a look.

We had a good vantage from his den window. After a wait of about twenty minutes we saw the bird fly down to the feeder from across the road.

It was a partial albino Cardinal, but instead of being splotched with white, it was a bright rosy pink all over. It had only the vestige of a crest. The beak was normally colored, but the legs were pink.

The Audubon's Shearwater: Odd Guest for Mrs. Richardson

From time to time, I have had birds brought to my studio by various people who have found ailing birds or homeless fledglings. It was hoped that I might find these birds of some use to study and use as "models" for my paintings. Though it is a great care, it is always rewarding to me to have a living "model."

On August 1, 1963, a friend, Mrs. Paul Belknap, telephoned to say that her son, Jeff, had found a strange bird in the surf at Isle of Palms near Charleston, S. C. She wondered if I would like to take a look to see if a way could be found to treat its injured leg.

When Mrs. Belknap and Jeff rang the door bell, it was about sundown. With great curiosity, I saw this graceful ocean bird, for I never had seen an Audubon's Shearwater before. The bird was weak and trembling. The left leg was shattered, and needed immediate attention. Mrs. Belknap and I made an appointment with a veterinarian down the street to see the injured bird the next morning.

I placed the shearwater in a covered basket lined with soft cloth and a generous supply of paper towel. It ate a small portion of hamburger with my urging. It spent the night in the studio undisturbed. The next morning, I was almost surprised that it was still alive. With somewhat of a porpoise expression it looked up to me as I opened the basket, and it showed no fear.

I took the shearwater to Dr. Ernest Horres, who seemed curious and eager to see this new "patient." With bird in covered basket, I took my place with several other people who were waiting with cats and dogs to be seen before it would be my turn. One lady assumed that I had kittens in the covered basket and began talking about her cats. I listened, but did not disclose the contents of my basket. Soon Dr. Horres appeared with his nurse and she wrote for the file, the history of the only Audubon's Shearwater ever brought to them for treatment. It was found that it was necessary to amputate the shearwater's left leg. During surgery, all of the little mites, which looked like tiny quarter-of-an-inch splinters, left their host and could be seen in the basket on the white towel where the shearwater was placed after surgery. The mites were dead. It was supposed that the anesthetic was too much for them. Needless to say, my first problem was thus eliminated.

The next day, Mr. E. Burnham Chamberlain was called to verify my identification, which he did. He made measurements and took notes for use in a future issue of *The Chat*. The color of the shearwater appears, at first glance, to be black above and white underneath. However, upon closer observation, a tint of mauvish brown may be seen in the charcoal black covering the top of head, back, wings, and tail. The eyes appear black with a dark bluish cast. The throat is pure white. The undersides are a white with mingled gray. The bill is horn color with a grayish blue near the base. The lower mandible has a round sheath, two thirds the length of the bill, attached closely to the bill at the base. The nostrils are raised on the upper mandible, which ends with a downward curve. The leg and foot have a lavender tint. The outer toe to the fully webbed foot is black.

The diet, so far, has been shrimp, fish, and hamburger with codliver oil. The shearwater does not fly more than about four feet. When placed on the lawn outside it will crawl, using beak, wings, and the remaining foot. It always returns to its basket in the direction of the house or inclosure which was made to accommodate its needs. This includes a large tub of water. A small portion of salt is added to the water. It swims and bathes. When the weather was warmer, it remained out of doors. Now it stays inside. It is interesting to see how the shearwater uses its curved beak to climb up and into its basket, and to climb the old brick steps up from the studio.

The shearwater responds to sound, but so far it has made no sound at all. It is indeed, a strange bird, but a most interesting one. It is still our chief bird-boarder. To see a wild sea bird so tame and calm is a rare experience. I have had it for four and one half months now, and it appears to be in prime condition—ANNE WORSHAM RICHARDSON, *Charleston, S. C., January 15, 1964.*

Sea-visiting Woodcock

From Mrs. Henry Lawrence comes a report of a bird that has wandered far from its usual habitat. Her letter continues:

"I would like to report having seen an American Woodcock in our yard on December 13, 1963 and again on January 1, 1964.

"We live on the ocean front on Hilton Head Island, South Carolina. This bird was also seen by Mrs. Caroline Newhall, Mr. Lawrence and Mr. Houseman. Another Woodcock was seen by Mr. Houseman on December 31, 1963 on the causeway to Calibogue Cay, which is about three miles across the Island on the Inland Waterway.

"I understand that the Woodcock is rare on Hilton Head Island."

CHRISTMAS COUNT—1963

		COAST				COASTAL PLAIN							PIEDMONT									MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Rocky Mount, N. C.	Beaufort Co., N. C.	Mattamuskeet Ref., New Holland, N. C.	Wayne Co., N. C.	New Bern, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Greensboro, N. C.	Chapel Hill, N. C.	Raleigh, N. C.	New London, N. C.	Charlotte, N. C.	Anderson, S. C.	Crumpler, N. C.	Great Smoky Mtn. National Park, Tenn.-N. C.	Jackson Co., N. C.
Common Loon	219	6	52	153	5	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Red-throated Loon	44	1	38	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	298	16	11	233	17	..	6	..	1	12	..	1	..	..	..	1	..	..	..	..	..	..	..	..
Pied-billed Grebe	247	9	30	64	26	1	14	5	5	63	6	8	2	..	..	2	..	7	2	1	2	..	..	..
Brown Pelican	36	19	4	10	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	65	..	61	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Double-cr. Cormorant	68	1	11	18	37	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	153	11	6	22	33	2	2	9	4	12	4	1	5	1	..	3	4	..	27	..	5	..	2	..
Green Heron	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Little Blue Heron	14	..	1	5	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Egret	54	..	16	17	10	..	..	9	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Snowy Egret	36	2	1	15	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	55	21	2	20	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Night Heron	13	4	..	5	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Night Heron	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Bittern	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
American Bittern	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood Ibis	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	11	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whistling Swan	2370	..	..	..	..	..	370	2000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	56936	..	75	..	..	1	1300	55000	9	2	..	..	..	324	..	4	..	..	221	..	..	..	..	..
Snow Goose	200	..	..	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Goose	2500	..	..	..	..	..	..	2500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mallard	6447	25	500	85	94	16	220	4000	2	13	7	5	..	106	1	360	2	25	963	..	21	..	..	2
Black Duck	7360	270	500	134	81	4	130	6000	..	8	..	7	20	10	..	70	..	3	93	..	30	..	..	..
Gadwall	1202	9	4	101	10	..	15	1000	..	15	..	45	..	..	..	..	..	3	..	..	..	..	..	..
Pintail	15715	..	6	500	4	..	200	15000	..	..	..	1	..	..	..	..	..	2	2	..	..	..	..	..
Gr.-wg. Teal	3539	75	10	401	36	..	10	3000	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-wg. Teal	308	..	8	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Am. Widgeon	[illegible]	[illegible]	1	[illegible]	[illegible]	..	[illegible]	2000	..	..	..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shoveler	801	..	300	500	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Wood Duck	246	..	2	145	19	1	..	15	14	17	..	..	..	12	8	8	..	1	4	..	..	..	..	..
Redhead	169	150	1	3	5	..	..	..	..	2	..	..	..	..	..	8	..	..	..	..	..	..	..	..
Ring-necked Duck	1616	..	3	112	10	1	80	..	2	181	8	76	..	..	..	915	..	170	55	..	3	..	..	..
Canvasback	2973	..	..	250	..	..	1700	1000	..	1	..	..	..	..	..	22	..	..	..	..	..	..	..	..
Scaup (sp.)*	7343	200	2	293	6435	..	300	..	..	43	..	45	..	..	..	7	..	15	..	..	3	..	..	..
Common Goldeneye	36	..	..	29	..	..	..	1	..	2	..	..	..	..	..	..	..	..	4	..	..	..	..	..
Bufflehead	732	95	40	381	40	..	50	3	..	33	..	..	4	..	..	50	..	6	30	..	..	..	..	..
Oldsquaw	15	..	1	13	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White-wg. Scoter	20	..	..	5	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surf Scoter	1018	1	..	1000	7	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Scoter	5404	1	..	5000	403	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	6388	1350	12	502	7	..	3475	1000	..	8	..	..	..	..	..	20	..	14	..	..	..	..	..	..
Hooded Merganser	261	6	12	107	36	22	..	20	2	13	..	4	..	..	..	14	4	14	4	..	3	..	..	..
Common Merganser	94	..	1	1	..	..	10	..	..	..	..	..	80	..	..	..	..	2	..	..	..	..	..	..
Red-br. Merganser	473	21	60	315	74	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turkey Vulture	294	..	2	72	55	10	2	1	7	6	3	1	1	86	..	10	12	14	5	..	6	..	1	..
Black Vulture	237	..	1	63	109	5	4	18	6	..	6	6	..	..	..	2	5	11	..	..	1	..	..	..
Sharp-sh. Hawk	11	..	..	1	1	..	..	..	..	3	..	1	..	..	..	..	1	1	1	1	1	..	..	..
Cooper's Hawk	8	..	..	1	..	..	..	1	..	..	2	..	..	1	..	..	..	1	1	..	..	..	1	..
Red-tailed Hawk	132	..	2	14	35	35	2	2	1	1	4	2	2	..	..	14	1	3	2	1	9	..	2	..
Red-shouldered H.	75	..	2	17	27	..	..	1	3	3	4	3	..	1	..	3	1	3	1	4	2	..	..	..
Rough-legged Hawk	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bald Eagle	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marsh Hawk	82	..	5	33	17	2	..	3	3	1	3	2	..	..	..	1	1	1	3	..	7	..	..	..
Osprey	4	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Peregrine Falcon	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pigeon Hawk	4	..	..	1	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparrow Hawk	226	13	9	18	43	4	19	29	17	6	28	2	2	..	..	6	7	4	1	3	9	2	3	1
Ruffed Grouse	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	1
Bobwhite	639	28	6	12	21	21	2	15	6	55	52	17	17	33	14	63	5	37	62	101	50	14	8	..
Turkey	5	..	..	1	1	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	46	2	2	20	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia Rail	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sora	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Com. Gallinule	21	..	6	6	8	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	3869	..	275	531	16	..	300	2000	..	433	26	88	..	..	..	200	..	..	..	..	..	..	..	..
Am. Oystercatcher	1841	1	1	1830	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipal. Plover	263	8	5	153	97	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piping Plover	15	..	6	3	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	556	94	24	55	98	23	16	20	15	49	32	4	5	..	1	31	17	7	24	10	27	..	4	..
Bl.-bellied Plover	297	18	50	163	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	263	4	..	208	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	14	..	..	4	3	1	..	2	..	..	..	..	2	..	..	..	..	..	1	..	1	..	..	..
Com. Snipe	145	1	15	27	17	9	2	34	1	7	3	3	..	..	..	1	..	2	16	4	3	..	..	..
Spotted Sandpiper	8	..	..	4	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willet	93	..	12	54	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Greater Yellowlegs	54	9	8	24	12	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lesser Yellowlegs	21	..	..	17	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CHRISTMAS COUNT—1963

		COAST				COASTAL PLAIN							PIEDMONT									MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Rocky Mount, N. C.	Beaufort Co., N. C.	Mattamuskeet Ref., New Holland, N. C.	Wayne Co., N. C.	New Bern, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Greensboro, N. C.	Chapel Hill, N. C.	Raleigh, N. C.	New London, N. C.	Charlotte, N. C.	Anderson, S. C.	Crumpler, N. C.	Great Smoky Mtn. National Park, Tenn.-N. C.	Jackson Co., N. C.
Common Loon	219	6	52	153	5	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Red-throated Loon	44	1	38	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	298	16	11	233	17	..	6	..	1	12	..	1	..	..	..	1	..	..	..	..	..	..	..	..
Pied-billed Grebe	247	9	30	64	26	1	14	5	5	63	6	8	2	..	..	2	..	7	2	1	2	..	..	..
Brown Pelican	36	19	4	10	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	65	..	61	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Double-cr. Cormorant	68	1	11	18	37	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	153	11	6	22	33	2	2	9	4	12	4	1	5	1	..	3	4	..	27	..	5	..	2	..
Green Heron	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Little Blue Heron	14	..	1	5	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Egret	54	..	16	17	10	..	..	9	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Snowy Egret	36	2	1	15	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	55	21	2	20	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Night Heron	13	4	..	5	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Night Heron	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Bittern	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
American Bittern	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood Ibis	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	11	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whistling Swan	2370	..	..	..	..	..	370	2000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	56936	..	75	..	..	1	1300	55000	9	2	..	..	..	324	..	4	..	..	221	..	..	..	..	..
Snow Goose	200	..	..	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Goose	2500	..	..	..	..	..	..	2500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mallard	6447	25	500	85	94	16	220	4000	2	13	7	5	..	106	1	360	2	25	963	..	21	..	..	2
Black Duck	7360	270	500	134	81	4	130	6000	..	8	..	7	20	10	..	70	..	3	93	..	30	..	..	..
Gadwall	1202	9	4	101	10	..	15	1000	..	15	..	45	..	..	..	..	..	3	..	..	..	..	..	..
Pintail	15715	..	6	500	4	..	200	15000	..	..	..	1	..	..	..	..	..	2	2	..	..	..	..	..
Gr.-wg. Teal	3539	75	10	401	36	..	10	3000	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-wg. Teal	308	..	8	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Widgeon	3010	65	1	50	48	..	750	2000	..	..	..	90	..	..	..	2	..	6	..	..	..	..	..	..
Shoveler	801	..	300	500	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Wood Duck	246	..	2	145	19	1	..	15	14	17	..	..	..	12	8	8	..	1	4	..	..	..	..	..
Redhead	169	150	1	3	5	..	..	..	..	2	..	..	..	..	..	8	..	..	..	..	..	..	..	..
Ring-necked Duck	1616	..	3	112	10	1	80	..	2	181	8	76	..	..	..	915	..	170	55	..	3	..	..	..
Canvasback	2973	..	..	250	..	..	1700	1000	..	1	..	..	..	..	..	22	..	..	..	..	..	..	..	..
Scaup (sp.)*	7343	200	2	293	6435	..	300	..	..	43	..	45	..	..	..	7	..	15	..	..	3	..	..	..
Common Goldeneye	36	..	..	29	..	..	..	1	..	2	..	..	..	..	..	..	..	..	4	..	..	..	..	..
Bufflehead	732	95	40	381	40	..	50	3	..	33	..	..	4	..	..	50	..	6	30	..	..	..	..	..
Oldsquaw	15	..	1	13	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White-wg. Scoter	20	..	..	5	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surf Scoter	1018	1	..	1000	7	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Scoter	5404	1	..	5000	403	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	6388	1350	12	502	7	..	3475	1000	..	8	..	..	..	..	..	20	..	14	..	..	..	..	..	..
Hooded Merganser	261	6	12	107	36	22	..	20	2	13	..	4	..	..	..	14	4	14	4	..	3	..	..	..
Common Merganser	94	..	1	1	..	..	10	..	..	..	..	..	80	..	..	..	..	2	..	..	..	..	..	..
Red-br. Merganser	473	21	60	315	74	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turkey Vulture	294	..	2	72	55	10	2	1	7	6	3	1	1	86	..	10	12	14	5	..	6	..	1	..
Black Vulture	237	..	1	63	109	5	4	18	6	..	6	6	..	..	..	2	5	11	..	..	1	..	..	..
Sharp-sh. Hawk	11	..	..	1	1	..	..	..	..	3	..	1	..	..	..	..	1	1	1	1	1	..	..	..
Cooper's Hawk	8	..	..	1	..	..	..	1	..	..	2	..	..	1	..	..	..	1	1	..	..	..	1	..
Red-tailed Hawk	132	..	2	14	35	35	2	2	1	1	4	2	2	..	..	14	1	3	2	1	9	..	2	..
Red-shouldered H.	75	..	2	17	27	..	..	1	3	3	4	3	..	1	..	3	1	3	1	4	2	..	..	..
Rough-legged Hawk	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bald Eagle	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marsh Hawk	82	..	5	33	17	2	..	3	3	1	3	2	..	..	..	1	1	1	3	..	7	..	..	..
Osprey	4	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Peregrine Falcon	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pigeon Hawk	4	..	..	1	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparrow Hawk	226	13	9	18	43	4	19	29	17	6	28	2	2	..	..	6	7	4	1	3	9	2	3	1
Ruffed Grouse	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	1
Bobwhite	639	28	6	12	21	21	2	15	6	55	52	17	17	33	14	63	5	37	62	101	50	14	8	..
Turkey	5	..	..	1	1	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	46	2	2	20	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia Rail	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sora	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Com. Gallinule	21	..	6	6	8	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	8869	..	275	531	16	..	300	2000	..	433	26	88	..	..	..	200	..	..	..	..	..	..	..	..
Am. Oystercatcher	1841	1	1	1830	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipal. Plover	263	8	5	153	97	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piping Plover	15	..	6	3	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	556	94	24	55	98	23	16	20	15	49	32	4	5	..	1	31	17	7	24	10	27	..	4	..
Bl.-bellied Plover	297	18	50	163	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	263	4	..	208	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	14	..	..	4	3	1	..	2	..	..	..	..	2	..	..	..	..	..	1	..	1	..	..	..
Com. Snipe	145	1	15	27	17	9	2	34	1	7	3	3	..	..	..	1	..	2	16	4	3	..	..	..
Spotted Sandpiper	8	..	..	4	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willet	93	..	12	54	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Greater Yellowlegs	54	9	8	24	12	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lesser Yellowlegs	21	..	..	17	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CHRISTMAS COUNT—1963

		COAST				COASTAL PLAIN							PIEDMONT									MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Rocky Mount, N. C.	Beaufort Co., N. C.	Mattamuskeet Ref., New Holland, N. C.	Wayne Co., N. C.	New Bern, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Greensboro, N. C.	Chapel Hill, N. C.	Raleigh, N. C.	New London, N. C.	Charlotte, N. C.	Anderson, S. C.	Crumpler, N. C.	Great Smoky Mtn. National Park, Tenn.-N. C.	Jackson Co., N. C.
Knot	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	210	3	..	100	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunlin	1276	13	124	823	316	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher	1933	15	50	1868	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Sandp.	278	9	66	173	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Sandpiper	259	..	35	195	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marbled Godwit	300	..	..	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sanderling	501	104	28	112	257	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	14	4	5	2	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	2065	900	700	51	72	..	150	3	..	157	..	..	20	..	..	..	..	..	8	..	4	..	..	..
Ring-billed Gull	4301	400	2839	128	150	..	182	2	..	360	63	..	100	..	..	..	3	..	67	..	7	..	..	..
Laughing Gull	16	1	2	..	11	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	159	6	72	80	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	45	9	9	12	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Tern	15	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	18	..	9	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	25	..	2	12	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	39	..	25	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	3545	29	76	61	358	73	116	212	204	58	128	15	83	199	220	309	66	214	640	153	251	..	79	1
Ground Dove	11	..	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow-billed Cuckoo	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Owl	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Screech Owl	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Gr. Horned Owl	13	..	5	1	..	..	..	..	2	..	..	..	..	..	..	2	..	..	1	..	2	..	..	..
Barred Owl	12	..	2	4	2	..	..	..	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..
Belted Kingfisher	103	9	5	23	18	..	2	3	1	6	4	1	1	1	1	8	4	2	4	3	3	..	4	..
Yel.-sh. Flicker	1194	17	36	125	318	14	28	250	30	27	52	17	11	9	2	70	34	47	38	35	14	2	14	4
Pileated Woodp.	90	..	1	34	18	..	2	..	2	6	..	5	..	4	1	1	1	..	1	..	..	..	12	2
Red-bellied Woodp.	399	2	15	85	45	9	20	5	9	11	25	7	5	7	..	56	27	20	14	24	7	..	5	1
Red-headed Woodp.	80	4	2	9	3	1	5	..	1	2	1	..	3	..	..	15	2	19	6	4	1	2	..	..
Yel.-bel. Sapsucker	220	1	9	40	17	5	5	..	8	11	8	11	..	8	..	22	22	9	8	12	6	1	16	1
Hairy Woodpecker	77	..	3	7	10	..	2	1	1	..	2	..	..	1	..	11	15	5	3	4	3	1	6	2
Downy Woodpecker	356	2	8	22	17	3	9	1	5	9	9	14	5	16	4	68	34	15	40	18	11	9	34	3
Red-cockaded Woodp.	20	..	..	10	..	..	6	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Phoebe	72	1	3	7	15	..	1	7	3	1	5	2	1	2	..	..	2	2	3	2	2	2	2	9
Horned Lark	254	..	..	..	..	63	..	..	..	..	..	..	..	..	2	32	8	..	93	8	33	9	6	..
Tree Swallow	263	..	7	1	255	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Jay	1753	6	53	162	119	13	46	..	25	27	78	4	23	19	12	407	85	190	178	152	51	[illegible]	[illegible]	[illegible]

Common Raven	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..
Common Crow	2841	8	7	169	409	13	42	200	5	17	85	28	19	95	168	292	72	76	543	100	39	249	200	5
Fish Crow	420	45	165	59	14	..	..	100	..	36	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cap. Chickadee	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Car. Chickadee	1016	3	14	64	61	10	40	2	13	30	32	9	11	29	11	170	83	72	65	80	39	9	150†	19
Tufted Titmouse	676	..	18	39	14	7	24	..	12	37	17	2	3	28	12	95	56	45	42	36	27	36	110	16
White-br. Nuthatch	151	..	1	4	..	2	6	..	1	7	1	..	3	18	1	37	35	11	1	8	2	4	2	7
Red-br. Nuthatch	146	..	18	1	4	..	3	..	2	4	2	..	..	3	2	19	4	1	..	1	1	..	78	3
Brown-hd. Nuthatch	188	1	12	44	12	2	8	..	6	20	8	1	2	2	..	10	16	22	8	13	1	..	..	..
Brown Creeper	62	1	1	8	2	2	4	..	2	..	5	..	2	1	..	5	9	2	..	1	2	..	13	2
House Wren	16	2	5	4	2	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Wren	44	..	1	5	1	..	..	..	..	4	1	..	2	4	1	2	..	4	..	1	..	6	12	..
Carolina Wren	422	4	14	71	28	2	18	3	8	23	17	6	3	16	14	25	46	31	25	17	8	6	30	7
Long-bil. M. Wren	7	1	4	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	32	..	26	1	4	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	1036	40	55	51	98	24	37	13	15	46	64	5	22	18	2	182	52	123	68	81	22	7	10	1
Catbird	27	1	7	4	9	..	1	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brown Thrasher	281	2	15	88	55	2	6	1	3	13	29	2	2	..	..	10	7	18	9	10	8	..	..	1
Robin	4313	45	45	487	685	158	283	1000	68	65	390	8	2	15	75	3	136	42	356	426	8	1	13	2
Hermit Thrush	139	..	7	56	12	..	4	2	4	1	1	..	..	..	6	2	4	3	3	5	3	..	19	7
Swainson's Thrush	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gray-ch. Thrush	2	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Bluebird	373	..	4	15	30	4	4	..	23	..	22	7	7	12	4	11	22	27	44	32	16	7	80	2
Bl.-gray Gnatcatcher	10	..	6	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Golden-cr. Kinglet	139	..	3	29	..	..	..	2	2	1	2	..	3	..	..	18	5	6	2	2	2	..	54	8
Ruby-cr. Kinglet	402	1	25	82	31	..	12	..	6	12	77	7	1	5	1	19	19	24	28	11	14	..	25	2
Water Pipit	84	..	18	24	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	32	3	..	..	..
Cedar Waxwing	739	..	..	83	20	21	8	6	..	6	11	..	11	24	4	66	141	207	34	33	50	..	14	..
Northern Shrike	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Log. Shrike	341	2	9	22	44	8	6	2	18	8	13	9	8	4	..	61	16	36	15	26	30	..	3	1
Starling	1,271,062	550	834	85	124	187	119	2000	101	796	1370	1	6420	850	71	1,200,000	295	831	188	946	55000	81	210	3
White-eyed Vireo	3	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Solitary Vireo	4	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Bl.-and-wh. Warbler	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Orange-cr. Warbler	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Myrtle Warbler	3519	142	189	127	195	8	248	2000	39	170	19	12	4	9	2	101	87	31	17	34	24	..	60	1
Yellow-thtd. Warbler	5	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pine Warbler	151	9	2	31	5	3	16	..	2	18	10	..	..	..	..	5	14	31	..	3	2	..	..	..
Palm Warbler	40	1	6	1	5	..	10	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	15	..
Ovenbird	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellowthroat	30	..	1	10	15	..	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House Sparrow	6697	115	858	10	1	173	333	500	83	167	992	2	125	101	24	1353	66	271	580	155	425	182	180	1
E. Meadowlark	5483	180	157	318	316	131	97	500	50	26	1221	6	74	521	15	364	181	329	255	276	305	36	125	..
Red-winged Blackbird	110554	117	702	811	648	102	169	25000	13	4682	1161	6	5	..	42	2000	17	24	53	..	75000	..	2	..
Baltimore Oriole	72	..	1	..	..	22	2	..	18	7	..	..	1	..	..	..	2	5	12	2	..	..	..	..

CHRISTMAS COUNT—1963

		COAST				COASTAL PLAIN							PIEDMONT									MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Rocky Mount, N. C.	Beaufort Co., N. C.	Mattamuskeet Ref., New Holland, N. C.	Wayne Co., N. C.	New Bern, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Greensboro, N. C.	Chapel Hill, N. C.	Raleigh, N. C.	New London, N. C.	Charlotte, N. C.	Anderson, S. C.	Crumpler, N. C.	Great Smoky Mtn. National Park, Tenn.-N. C.	Jackson Co., N. C.
Knot	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	210	3	..	100	107	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunlin	1276	13	124	823	316	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher	1933	15	50	1868	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Sandp.	278	9	66	173	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Sandpiper	259	..	35	195	29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marbled Godwit	300	..	..	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sanderling	501	104	28	112	257	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	14	4	5	2	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	2065	900	700	51	72	..	150	3	..	157	..	..	20	..	..	..	..	..	8	..	4	..	..	..
Ring-billed Gull	4301	400	2839	128	150	..	182	2	..	360	63	..	100	..	..	..	3	..	67	..	7	..	..	..
Laughing Gull	16	1	2	..	11	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	159	6	72	80	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	45	9	9	12	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Tern	15	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	18	..	9	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	25	..	2	12	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	39	..	25	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	3545	29	76	61	358	73	116	212	204	58	128	15	83	199	220	309	66	214	640	153	251	..	79	1
Ground Dove	11	..	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow-billed Cuckoo	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Owl	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Screech Owl	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Gr. Horned Owl	13	..	5	1	..	..	..	..	2	..	..	..	..	..	..	2	..	..	1	..	2	..	..	..
Barred Owl	12	..	2	4	2	..	..	..	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..
Belted Kingfisher	103	9	5	23	18	..	2	3	1	6	4	1	1	1	1	8	4	2	4	3	3	..	4	..
Yel.-sh. Flicker	1194	17	36	125	318	14	28	250	30	27	52	17	11	9	2	70	34	47	38	35	14	2	14	4
Pileated Woodp.	90	..	1	34	18	..	2	..	2	6	..	5	..	4	1	1	1	..	1	..	..	..	12	2
Red-bellied Woodp.	399	2	15	85	45	9	20	5	9	11	25	7	5	7	..	56	27	20	14	24	7	..	5	1
Red-headed Woodp.	80	4	2	9	3	1	5	..	1	2	1	..	3	..	..	15	2	19	6	4	1	2	..	..
Yel.-bel. Sapsucker	220	1	9	40	17	5	5	..	8	11	8	11	..	8	..	22	22	9	8	12	6	1	16	1
Hairy Woodpecker	77	..	3	7	10	..	2	1	1	..	2	..	..	1	..	11	15	5	3	4	3	1	6	2
Downy Woodpecker	356	2	8	22	17	3	9	1	5	9	9	14	5	16	4	68	34	15	40	18	11	9	34	3
Red-cockaded Woodp.	20	..	..	10	..	..	6	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Phoebe	72	1	3	7	15	..	1	7	3	1	5	2	1	2	..	..	2	2	3	2	2	2	2	9
Horned Lark	254	..	..	..	..	63	..	..	..	..	..	..	..	..	2	32	8	..	93	8	33	9	6	..
Tree Swallow	263	..	7	1	255	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Swallow	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	..	[illegible]	[illegible]	78	4	[illegible]	10	12	[illegible]	[illegible]	[illegible]	178	[illegible]	21	[illegible]	85	[illegible]
Common Raven	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..
Common Crow	2841	8	7	169	409	13	42	200	5	17	85	28	19	95	168	292	72	76	543	100	39	249	200	5
Fish Crow	420	45	165	59	14	..	..	100	..	36	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cap. Chickadee	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Car. Chickadee	1016	3	14	64	61	10	40	2	13	30	32	9	11	29	11	170	83	72	65	80	39	9	150†	19
Tufted Titmouse	676	..	18	39	14	7	24	..	12	37	17	2	3	28	12	95	56	45	42	36	27	36	110	16
White-br. Nuthatch	151	..	1	4	..	2	6	..	1	7	1	..	3	18	1	37	35	11	1	8	2	4	2	7
Red-br. Nuthatch	146	..	18	1	4	..	3	..	2	4	2	..	..	3	2	19	4	1	..	1	1	..	78	3
Brown-hd. Nuthatch	188	1	12	44	12	2	8	..	6	20	8	1	2	2	..	10	16	22	8	13	1	..	..	..
Brown Creeper	62	1	1	8	2	2	4	..	2	..	5	..	2	1	..	5	9	2	..	1	2	..	13	2
House Wren	16	2	5	4	2	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Wren	44	..	1	5	1	..	..	..	..	4	1	..	2	4	1	2	..	4	..	1	..	6	12	..
Carolina Wren	422	4	14	71	28	2	18	3	8	23	17	6	3	16	14	25	46	31	25	17	8	6	30	7
Long-bil. M. Wren	7	1	4	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	32	..	26	1	4	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	1036	40	55	51	98	24	37	13	15	46	64	5	22	18	2	182	52	123	68	81	22	7	10	1
Catbird	27	1	7	4	9	..	1	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brown Thrasher	281	2	15	88	55	2	6	1	3	13	29	2	2	..	..	10	7	18	9	10	8	..	..	1
Robin	4313	45	45	487	685	158	283	1000	68	65	390	8	2	15	75	3	136	42	356	426	8	1	13	2
Hermit Thrush	139	..	7	56	12	..	4	2	4	1	1	..	..	..	6	2	4	3	3	5	3	..	19	7
Swainson's Thrush	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gray-ch. Thrush	2	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Eastern Bluebird	373	..	4	15	30	4	4	..	23	..	22	7	7	12	4	11	22	27	44	32	16	7	80	2
Bl.-gray Gnatcatcher	10	..	6	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Golden-cr. Kinglet	139	..	3	29	..	..	..	2	2	1	2	..	3	..	..	18	5	6	2	2	2	..	54	8
Ruby-cr. Kinglet	402	1	25	82	31	..	12	..	6	12	77	7	1	5	1	19	19	24	28	11	14	..	25	2
Water Pipit	84	..	18	24	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	32	3	..	..	..
Cedar Waxwing	739	..	..	83	20	21	8	6	..	6	11	..	11	24	4	66	141	207	34	33	50	..	14	..
Northern Shrike	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Log. Shrike	341	2	9	22	44	8	6	2	18	8	13	9	8	4	..	61	16	36	15	26	30	..	3	1
Starling	1,271,062	550	834	85	124	187	119	2000	101	796	1370	1	6420	850	71	1,200,-000	295	831	188	946	55000	81	210	3
White-eyed Vireo	3	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Solitary Vireo	4	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Bl.-and-wh. Warbler	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Orange-cr. Warbler	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Myrtle Warbler	3519	142	189	127	195	8	248	2000	39	170	19	12	4	9	2	101	87	31	17	34	24	..	60	1
Yellow-thtd. Warbler	5	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pine Warbler	151	9	2	31	5	3	16	..	2	18	10	..	..	..	..	5	14	31	..	3	2	..	..	..
Palm Warbler	40	1	6	1	5	..	10	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	15	..
Ovenbird	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellowthroat	30	..	1	10	15	..	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House Sparrow	6697	115	858	10	1	173	333	500	83	167	992	2	125	101	24	1353	66	271	580	155	425	182	180	1
E. Meadowlark	5483	180	157	318	316	131	97	500	50	26	1221	6	74	521	15	364	181	329	255	276	305	36	125	..
Red-winged Blackbird	110554	117	702	811	648	102	169	25000	13	4682	1161	6	5	..	42	2000	17	24	53	..	75000	..	2	..
Baltimore Oriole	72	..	1	..	..	22	2	..	18	7	..	..	1	..	..	..	2	5	12	2	..	..	..	..

CHRISTMAS COUNT—1963

		COAST				COASTAL PLAIN							PIEDMONT									MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Rocky Mount, N. C.	Beaufort Co., N. C.	Mattamuskeet Ref., New Holland, N. C.	Wayne Co., N. C.	New Bern, N. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Greensboro, N. C.	Chapel Hill, N. C.	Raleigh, N. C.	New London, N. C.	Charlotte, N. C.	Anderson, S. C.	Crumpler, N. C.	Great Smoky Mtn. National Park, Tenn.-N. C.	Jackson Co., N. C.
Rusty Blackbird	6577	20	4	131	105	..	5	..	14	10	..	..	..	..	5	1000	1	..	100	176	5000	..	6	..
Boat-tailed Grackle	1566	37	161	130	1238	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	1,851,284	450	39	431	43	3	24	..	2	28	223	..	5	10	..	1,800,-000	1	2	10	4	50000	3	..	6
Br.-hd. Cowbird	3111	4	25	1	2	243	..	..	38	30	258	..	..	..	..	2000	50	10	..	..	450	..	..	..
Cardinal	2602	17	73	154	504	17	44	5	53	123	144	7	22	84	21	359	155	123	306	184	35	83	70	19
Dickcissel	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rose-br. Grosbeak	3	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Evening Grosbeak	284	..	..	..	..	75	70	..	6	7	..	..	45	..	..	7	2	..	..	..	..	..	72	..
Purple Finch	863	3	25	12	..	39	5	..	..	77	24	..	28	31	17	146	97	21	56	194	..	1	85	2
Com. Redpoll	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..	..
Pine Siskin	3348	..	7	..	7	..	..	..	..	5	13	..	..	..	..	98	11	35	203	91	1	76	2800	1
Am. Goldfinch	1276	..	105	181	40	7	20	..	2	22	88	4	3	45	20	246	46	82	139	30	65	57	60	14
Red Crossbill	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	89	..
White-wg. Crossbill	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	..	..	..	..	..	..	15	1
Ruf.-sided Towhee	1710	4	38	826	91	14	15	2	14	41	195	5	8	21	21	118	72	62	30	57	39	3	11	23
Ipswich Sparrow	7	1	1	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	552	24	146	33	108	51	13	8	61	12	..	12	..	..	..	3	18	12	..	7	42	..	..	2
Grasshopper Sparrow	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
Sharp-tail. Sparrow	14	..	3	5	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Seaside Sparrow	9	1	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	236	1	5	36	178	..	..	..	1	..	5	5	..	..	..	..	.	2	3	..	..	..	..	..
Bachman's Sparrow	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Slate-colored Junco	7482	120	159	260	188	183	149	16	247	218	299	101	138	184	4	1793	492	919	704	626	54	86	292	250
Chipping Sparrow	365	4	5	32	205	25	7	..	..	14	30	..	..	..	..	5	1	..	31	..	..	6	..	..
Field Sparrow	1144	48	24	22	92	43	60	7	4	6	41	..	27	5	9	135	46	177	64	93	79	..	100	62
White-cr. Sparrow	40	..	..	..	..	..	..	..	..	..	..	..	..	9	..	20	..	..	..	..	9	2	..	..
White-thtd. Sparrow	5341	70	192	819	383	69	190	17	107	218	437	2	57	338	79	926	272	380	233	137	218	..	190	8
Fox Sparrow	385	57	55	130	9	3	8	4	18	11	16	..	1	17	5	7	17	5	2	5	4	5	6	..
Swamp Sparrow	697	2	18	165	11	1	2	63	2	34	2	6	5	..	..	313	6	17	1	19	17	..	13	..
Song Sparrow	2062	70	20	186	66	1	11	9	4	67	53	21	14	45	22	635	163	149	76	72	146	41	157	34
Number of Species	196	93	135	154	140	61	83	79	70	90	70	63	55	49	39	82	67	75	74	58	72	36	58	44
Number of Individuals	3,460,3	6275	10,736	24,993	16,619	1994	11,690	126,850	1460	8804	7951	772	7475	3384	924	3,015,49	3226	5150	6935	4546	187,749	1072	5664	559

* See text for species

† Includes some Black-capped Chickadees

CHRISTMAS COUNT — 1963

BY B. R. CHAMBERLAIN AND ELOISE F. POTTER

The 1963 Christmas Count was made at 23 locations in the Carolinas (there were 24 locations in the 1961 count, and 24 in the 1962 count). What part of the total area of the two Carolinas was covered in the 1963 count? The total land area of the two states is given as 79,339 (World Alamanac) square miles. The combined area of 23 standard 15 mile diameter circles is 4064.4 square miles. That is *five per cent* of the area of the two states. In short, one twentieth of our territory was covered in our 1963 census. This assumes complete coverage at each location and this is seldom if ever achieved. It is well to keep this five per cent in mind in evaluating the results of our counts.

The present count was made under generally overcast skies with temperatures ranging from freezing into the low 50's. The winds were mild to brisk and generally northerly. This made for fairly comfortable census taking—with the probable exception of a boating party off the beaches at Charleston—and may have contributed to the tally of **196 species**, the highest number ever recorded for the two states. Nearly three and one half million birds were found. As great as this number is, it is less than half of the total individuals found in the Carolinas count of 1961. That count, however, included a roost of Starlings and blackbirds at Clemson, S. C., and that location regretfully is not represented in the present count.

The observers this year numbered 286. They covered their territory in 675.5 party-hours. For comparison, in 1962, 297 observers made that count in a total of 817 party-hours.

Of the 196 species reported, 56 were found at all locations. Species found only on the coast numbered 53, and in the mountains, 2 species were found that were not found in other areas.

Grosbeaks, crossbills, and Pine Siskins were reported at several locations. The extent of the invasion by these species and the duration of their stay will be reported at the end of the winter. The unprecedented total of 3,348 Pine Siskins in this count indicates a very strong southward movement.

Happily, the Bald Eagle is back in our count. Four were found this year. The Bluebird count of 373 is a bit above last year's figure, 329. This is still a long way from the 961 total of 1958. Baltimore Orioles have shown a continuing increase over the past four winters. The successive totals were 19, 32, 52, and now, 72.

The sensation of the 1963 Christmas count was the appearance of *thirty-four* White-winged Crossbills. At Greensboro there were 18; in the Great Smoky Mountains count, 15; and in the Jackson County, N. C., count, there was 1. At Chapel Hill, N. C., 30 Common Redpolls were observed. Other noteworthy finds are mentioned in the following location reports.

Aiken (Savannah River Project), S. C. (all points within a 15-mile diameter circle centered approximately 7 miles E of the old town at Ellenton, as for Spring Count; bottomland hardwood 25%, natural pine stands and pine plantations 25%, ponds, lakes and Carolina Bays 20%, open and brushy fields 20%, scrub oak lands 10%). 3 Jan.; 7:30 AM to 5 PM. Clear; temp. 29-70°; wind W 10-14 mph. Five observers in 1 party. Total party-miles, 123 (118 by jeep, 5 on foot). **Total species, 63; total individuals, 772.** Woods roads were partly blocked by fallen limbs and trees in the aftermath of a severe ice storm, which caused the count to be taken after the official period had ended. The Scaup were Lesser. A **Gray-checked Thrush** was the most unusual observation of the day.—Jimmy D. Broughton, John B. Hatcher (compiler), Dr. Howard D. Orr, Thomas M. Rial, J. H. Schnell.

Anderson County, S. C. (all points within a 15-mile diameter circle centered at Anderson Airport, including Hartwell Lake backwaters and the city of Anderson and towns of Starr and Sandy Springs; open field 25%, deciduous woods 20%, pine woods 20%, mixed woods 15%, ponds and creeks 5%, town 5%, Hartwell area 10%).—28 Dec.; 6 AM to 6 PM. Partly cloudy; temp. 28-49°; wind calm. Seven observers in 3 parties, 1 individual working own yard. Total party-hours, 15 (5 by car, 10 on foot); total party-miles, 105 (100 by car, 5 on foot). **Total species, 72; total individuals, 187,749.** Scaup were Lesser; the Rufous-sided Towhees, Red-eyed; the Horned Larks included 3 identified as Northern. The area included a large blackbird roost and a small one.—Mr. and Mrs. C. B. Nichols, Barbara Ramseur, Douglas Tedards, Mr. R. C. Tedards, Mrs. R. C. Tedards (compiler), Reggie Titmas, Mrs. Caroline Watson.

Beaufort County, N. C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County, including both sides of river from Bath to Washington; river and shore 50%, fields 30%, mixed woods 10%, pine woods 5%, feeders 5%).—29 Dec.; 7 AM to 5:30 PM. Partly cloudy to fair; temp. 34-45°; wind NE 0-14 mph; ground bare, water open. Twelve observers in 4 parties, 4 individuals working own yards. Total party-hours, 25 (8 by car, 1 by plane, 16 on foot); total party-miles, 176 (89 by car, 80 by plane, 7 on foot). **Total species, 84; total individuals, 11,690.** (Seen in area during count period but not on count day: Red-breasted Merganser, American Woodcock, Barred Owl, Fish Crow.) Federal and State waterfowl men (AN, OF) made the waterfowl count by plane. Last year all Scaup were reported as Lesser. Trapping and banding in January and February revealed that the two species were mixed. A smaller mixed flock is back this year and is estimated as 130 Greater and 170 Lesser Scaup. The **Spotted Sandpiper** is a first December record for the county.—Ethel Barkley, Mabel Bowen, Ruth Brown, Margaret Conderman, Geraldine Cox (compiler), Sandra Edwards, Otto Florschutz, James McLaurin, Mary McLaurin, Alvin Noltemeier, Louise Satterthwaite, Marjorie Warren.

Chapel Hill, N. C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin streets; mixed deciduous woodlands 25%, open fields and farmlands 30%, pond, lake shores and creek banks 25%, pine woods 5%, wooded residential 15%).—29 Dec.; 6:30 AM to 5 PM. Clear; temp. 27-44°; wind light, water frozen. Seventeen observers in 8 parties. Total party-hours, 42 (9 by car, 33 on foot); total party-miles, 83 (54 by car, 29 on foot). **Total species, 67; total individuals, 3226.** The 30 **Common Redpolls** were identified by WBS.—William T. Dye, Dr. and Mrs. J. Logan Irvin, Claude S. George, Gerald R. MacCarthy, Mrs. W. D. Patterson, Wallace Patterson, Lloyd Shaw, Mrs. Pearson H. Stewart, Wiley B. Sanders, Mrs. Robert P. Teulings, Robert P. Teulings (compiler), Mr. and Mrs. Matt L. Thompson, Mrs. Adelaide Walters, Mrs. Fred R. Weedon, Edmund Welch.

Charleston, S. C. (all points within a 15-mile diameter circle centered 14 miles NE of Mt. Pleasant and ½ mile E of US Hwy. 17; fresh-water ponds and wooded swamps 25%, mixed and pine woods 25%, open fields and farm land 20%, salt-water creeks and marshes 25%, beach and ocean 5%).—28 Dec.; 7 AM to 5 PM. Mostly sunny; temp. 35-50°; wind N-NE 5-20 mph. Thirty observers in 9 parties. Total party-hours, 69 (12.5 by car, 13 by boat, 43.5 on foot); total party-miles, 253 (167 by car, 47 by boat, 39 on foot). **Total species, 154; total individuals, 24,993.** (Seen during count period but not on count day: Osprey, Whip-poor-will, the latter being 14 mi. NE of area.) Our all-time high number of species was doubtless aided by unusual water coverage on salt-water creeks and ocean. The following uncommon species were studied by competent observers and field marks noted well: **Common Merganser** (EAC, PM), **Red-breasted Nuthatch** (DG, *et al.*), **Swainson's Thrush** (RDE, ELB, et al.), **Gray-cheeked Thrush** (RDE, BBO). The two thrushes have been noted on several recent winter counts, an interesting development. Unusually large is the Oystercatcher count, possibly the best on the Atlantic Coast. Good also is the Marbled Godwit count. Both Greater and Lesser Scaup were noted as were both Red-eyed and White-eyed Towhees.—H. E. Armstrong, Mr. and Mrs. Roy Baker, Francis Barrington, T. A. Beckett III, T. A. Beckett IV, Mr. and Mrs. E. L. Blitch, B. R. Chamberlain, E. B. Chamberlain (compiler), David Chamberlain, E. C. Clyde, E. A. Cutts, Mrs. R. H. Coleman, J. H. Dick, R. D. Edwards, Mrs. Dorothy Glover, John Horlbeck, Peter Manigault, I. S. H. Metcalf, John Metcalf, Mr. and Mrs. B. F. McGuckin, Dr. and Mrs. B. B. Owens, Newton Seebeck, Elizabeth Simons, A. Sprunt, A. M. Wilcox, E. A. Williams.

Charlotte, Mecklenburg County, N. C. (all points within a 15-mile diameter circle centered at intersection of 7th and Briar Creek as in past 21 years; deciduous-pine woods and edge 35%, open fields 40%, streams and ponds 15%, city yards 10%).—28 Dec.; 7 AM to 5 PM. Partly cloudy; temp. 24-45°; wind NE 0-8 mph; ground bare, smaller bodies of water frozen. Fifteen observers in 4 parties, 3 individuals working own yards. Total party-hours, 30.5 (11 by car, 19.5 on foot); total party miles, 210.5 (197 by car, 13.5 on foot). **Total species, 58; total individuals, 4546.** (Seen in area during count period but not on count day: Chipping Sparrow.) Commercial and residential building continue at a rapid rate to destroy habitat in northeastern and southeastern sectors. Some common species such as the vultures were notably absent. Although the Red-winged Blackbird was missed, the flock of **Rusty Blackbirds** was a good find for the area.—William L. Anderson, John Anderson, Mrs. Edwin O. Clarkson, Dr. and Mrs. W. G. Cobey, J. P. Hamilton, Lee Jones, Mr. and Mrs. A. A. Kittinger, Mrs. J. H. Lovell, Mrs. Clinton McKay, Mrs. Willard W. McKeever, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mrs. George Potter, Miss Susan Rapp, William Smith, Jim Tyrrell (Mecklenburg Audubon Club, guests).

Columbia, Richland County, S. C. (all points within a 15-mile diameter circle centered at the State Capitol as last year; deciduous river and creek swamps 40%, pine woods 20%, open fields 25%, lake shores 5%, urban 10%). 30 Dec.; 7 AM to 5 PM. Partly cloudy; temp. 27-45°; wind NE 0-10 mph. Ten observers in 5 parties. Total party-hours, 30 (18 on foot, 12 by car); total party-miles, 130 (25 on foot, 105 by car). **Total species, 70; total individuals, 7951.** (Seen in area during count period but not on count day: 1 male **Rose-breasted Grosbeak** (NS) feeding in a tulip poplar tree 28 December.) The **Ovenbird** (WH, CMcC) was drinking from a pool when observed. The **3 Rose-breasted Grosbeaks** (KS, NS, TH) seen on the count day were all females.—Mrs. William T. Beck, Gilbert J. Bristow (compiler), Mrs. Theo Hartin, William Hartin, Mrs. P. B. Hendrix, Mrs. Helen Kendall, Clare McCall, Fred Sample, Mrs. Kay Sisson, Miss Norma Smith.

Crumpler, Ashe County, N. C. (all points within a 15-mile diameter circle centered at Hurt's farmhouse, Nathan's Creek Community, elevation 3000 ft.; mostly hilly: field edges, meadows and riverbottoms 40%, deciduous woods 20%, roadsides 35°, lawns and feeders 5%).—26 Dec.; 7:20 AM to 5:50 PM. Snow-covered ground; temp. 15-55°; wind 10-15 mph, part of day calm. Nine observers in 2 parties, 1 individual working own yard. Total party hours, 20 (7 by car, 13 on foot); total party-miles, 80 (36 by car, 44 on foot). **Total species, 36; total individuals, 1072.** (Seen in area during count period but not on count day: Killdeer, Belted Kingfisher, White-throated Sparrow.) The Common Grackle (ESK), Chipping Sparrow (BK), and White-crowned Sparrow (BJC) have not been seen on previous Christmas Counts. One immature **Northern Shrike** identified by BJC.—Betty Jane Carter, Billy Ann Carter, Mrs. A. B. Hurt (compiler), Alice Lyall, Mrs. Beulah Kiser, David Kiser, Dr. Elam S. Kurtz, Mike Kurtz, Mike Welch.

Elkin, N. C. (all points within a 15-mile diameter circle centered 4 miles NW of Elkin, N. C.; fields and hedgerows in river bottom 50%, pasture 20%, pine and hardwood woods upland 30%).—26 Dec.; 7 AM to 5 PM. Fair and beautiful, ponds frozen, ground covered with 1-3" of sleet (not glaze-ice but pellet ice); temp. 23-40°; wind SW 5 mph. Nine observers in

2 parties, 3 individuals working own yards. Total party-hours, 13 (5 by car, 8 on foot). **Total species, 49; total individuals, 3384.** (Seen in area during count period but not on count day: Brown Thrasher, Hermit Thrush, Evening Grosbeak.)—Tom Bryan, Harold Click, Gary Dornburg, Jeff Earp, Virginia Hart, Ola Hendren, Lin Hendren (compiler), Clara Henderson, E. M. Hodel, Freddie Mastin, Lewis Petree, Wendell P. Smith.

Great Smoky Mountains National Park, Tenn.-N. C. (all points within a 15-mile diameter circle centered on Bull Head of Mt. Leconte, same general area as the 1936-1956 counts).—29 Dec.; 7:30 AM to 5 PM. Clear; temp. 14-40°; wind 1-15 mph; ground snow-covered, from patches (lowland) to 10 inches in high altitudes. Nineteen observers in 9 parties. Total party-hours, 66 (51 on foot, 15 by car); total party-miles, 206 (56 on foot, 150 by car). **Total species, 58; total individuals, 5664.** Both Black-capped and Carolina Chickadees were observed.—The 15 **White-winged Crossbills** are of particular interest.—Vernon R. Bender Jr., Carlos C. Campbell, James M. Campbell, Donald Defoe, John Elson, Mary Enloe, Mr. and Mrs. H. C. Garlinghouse, David Highbaugh, Philip Huff, Mr. and Mrs. Robert A. Monroe, Paul S. Pardue, Mrs. Arthur Stupka, Arthur Stupka (compiler), Dr. and Mrs. James T. Tanner, Mr. and Mrs. George R. Wood (Tennessee Ornithological Society, National Park Service and guests).

Greensboro, Guilford County, N. C. (all points within a 15-mile diameter circle centered ½ mile SW of WBIG transmitter as in 1962; deciduous and pine woods 25%, thickets 20%, fresh-water lakes and ponds 30%, open fields 10%, marsh and wooded swamps 10%, lawns and parks 5%).—28 Dec.; 6 AM to 6 PM. Cloudy to partly cloudy; tem. 29-33°; wind N-NE 13 mph; lakes 15% open. Thirty-one observers in 9 parties, 1 individual working own yard. Total party-hours, 68.5 (39.5 by car, 29 on foot); total party-miles, 239 (208.5 by car, 30.5 on foot). **Total species, 82; total individuals, 3,015,499.** (Seen in area during count period but not on count day: Shoveler, Baltimore Oriole.) The most notable find was a flock of 18 **White-winged Crossbills** seen by BH, LC, TS and BK. For further details see General Field Notes.—Helen Bedon, Mrs. David Cason Jr., Inez Coldwell, Mrs. Floyd Craft, Larry Crawford, Kelly Culbreth, Mrs. R. D. Douglas, Charlotte DuBois, Mrs. René Hardré, Brad Hawkins (compiler), Fred Hinton, Sidney Holmes, Bruce Kappel, Robert Lasley, James Mattocks, Mrs. Robert McCoy, Ethel McNairy, Ida Mitchell, Elizabeth Osburn, Mrs. David Parsons Jr., Mr. and Mrs. George Perrett, Etta Schiffman, George Smith, Mrs. W. F. Smyre, Thomas Street, Mrs. C. R. Suratt, Mrs. D. G. Tipton, Mrs. Ralph Weisner (Piedmont Bird Club).

Henderson, N. C. (all points within a 15-mile diameter circle centered in Henderson, including parts of Henderson and Vance Counties; meadows, open fields, wooded land, and lake front). 30 Dec.; 7:50 AM to 4:50 PM. Some cloudiness; temp. 25-30°; wind about 8 mph. Four observers in 1 party, 3 individuals working own yards. **Total species, 55; total individuals, 7475.**—Misses Annie Gray Burroughs (compiler), Mariel Gary, May Hunter, Garnette Myers.

Hilton Head Island, Beaufort County, S. C. (all points within a 15-mile diameter circle centered at Hilton Head Island Post Office, including Hilton Head Island, Pinckney Island, Colleton Neck and parts of Bluffton, S. C.; mixed woods 25%, field and ponds 25%, pine woods 5%, tidal rivers and mud flats 25%, not defined 20%).—28 Dec.; 6 AM to 5:30 PM. Sunny but cold; temp. 34-56°; wind W to NW 10-15 mph. Forty-three observers in 10 parties. Total party-hours 84½ (18 by car, 66½ on foot); total party-miles, 270 (225 by car, 45 on foot). **Total species, 140; total individuals, 16,619.** The following somewhat unusual or difficult species were seen by competent observers under favorable conditions: **Wood Ibis** (FA), **Oldsquaw** (NB), White-winged Scoter (CAB, VH), **Yellow-billed Cuckoo** (FA), **Barn Swallow** (FA, CN), Pine Siskin (WAP, ML). The 2 Barn Swallows were associating with a flock of Tree Swallows.—Dr. Frank

Arnold, Mrs. C. Alden Baker, Mr. and Mrs. W. H. Branch, Mrs. Nancy Butler, Mrs. Gertrude Coolidge, Mrs. John Dill, Mrs. Violet Duane, Mr. and Mrs. Fred Hack, Miss Avery Hack, Byron Hack, Orion Hack, Mr. and Mrs. David Harrall, Mrs. Florence Harry, Mrs. Alva Hines, Miss Charlotte Inglesby, Miss Edith Inglesby, Dr. Arthur Jenkins, Mrs. Arlene Jones, Mrs. Imogene Lowden, Mr. and Mrs. Henry Lawrence, Mr. and Mrs. O. E. Mellinger, Miss Beatrice Milley, Mr. and Mrs. Emil Meyer, Mrs. Caroline Newhall (compiler), Mrs. W. A. Pitcairn, Miss Anne Reddy, Miss Marie Reddy, Bill Rogers, Mrs. Carl Rosenblath, Mr. and Mrs. C. S. Sergeant, Mrs. Joyce Swanberg, Mrs. Zack Van Landingham, Mrs. Blanche Weldy, Mrs. E. R. Wilde, Miss Sally White, Mrs. Alice Woodring.

Jackson County, N. C. (all points within a 15-mile diameter circle centered one mile SE of Tuckasegee on highway 281, including Cullowhee, Western Carolina College campus, Glenville, Cedar Cliff Lake, Bear Lake, Wolf Lake, and almost all of Thorpe Lake; open farmland and pasture 15%, coniferous woodland 15%, deciduous woodland 60%, lakes, ponds, streams and rivers 8%, residential 2%).—31 Dec.; 9 AM to 5 PM. Cloudy to heavy snow; temp. 22-32°; wind NE 5-15 mph; ground bare in morning, snow-covered in afternoon. Three observers in 3 parties. Total party-hours, 12 (4 by car, 8 on foot); total party-miles, 97 (91 by car, 6 on foot). **Total species, 44; total individuals 559.** (Seen in area during count period but not on count day: Sharp-shinned Hawk, Red-tailed Hawk, Bobwhite, Killdeer, Belted Kingfisher, House Wren, Cedar Waxwing, Eastern Meadowlark, Red-winged Blackbird, **Rusty Blackbird**, Swamp Sparrow.) Carolina and Black-capped Chickadees listed according to altitude when species could not be determined by voice and size. The **White-winged Crossbill** was heard and seen in flight at an altitude above 3700 ft. by RHP, who is familiar with the species.—Richard H. Peake Jr. (compiler), David I. Purser III, David I. Purser IV.

Mattamuskeet National Wildlife Refuge, New Holland, Hyde County, N. C. (All points within a 15-mile diameter circle centered at Mattamuskeet Lodge and including most of Mattamuskeet Refuge and portions of Swanquarter Refuge; fields and thickets 20%, pine woods and swamps 30%, fresh water lake 45%, fresh water swamps 5%).—22 Dec.; 7 AM to 6 PM. Clear; temp. 21-37°; wind NW 5 mph. Three observers in 1 party. Total party-hours, 11 (7 by car, 4 on foot); total party-miles, 96 (94 by car, 2 on foot). **Total species, 79; total individuals, 126,850.** The **Least Bittern** is uncommon in the winter.—Willie G. Cahoon (compiler), Geraldine Cox, Ethel Barkley.

Morehead City, Carteret County, N. C. (all points within a 15-mile diameter circle centered at Crab Point intersection; tidal creeks, rivers and sounds 50%, farmlands 5%, mixed and pine woods 10%, pine barrens 5%, dunes, thickets and ocean front 20%, residential 10%). 25 Dec.; 6:45 AM to 5:15 PM. Clear and cool; temp. 31-53°; wind NW 5-15 mph. Four observers in 3 parties, 1 individual working own yard. Total party-hours, 24.5 (4.5 by car, 20 on foot); total party-miles, 49 (20 by car, 29 on foot). **Total species, 93; total individuals, 6275.** (Seen in area during count period but not on count day: Gannet, Common Egret, American Bittern, Common Goldeneye, Marsh Hawk, American Woodcock, Pileated Woodpecker, Tufted Titmouse, Cedar Waxwing.) The **150 Redheads** were notable.—David Barnes, Mr. and Mrs. John Fussell, John O. Fussell III (compiler), Tommy Wade.

New Bern, N. C. (all points within a 15-mile diameter circle centered at New Bern Airport, to include Neuse River from mouth of Broad Creek to Street's Ferry, New Bern, Trent River to Hardison farm, farms east of airport; fields and marsh 40%, mixed woods 30%, residential 15%, open water 15%).—22 Dec.; 6:30 AM to 5:30 PM. Clear; temp. 18-38°; wind N-NE, 5-10 mph. Twelve observers in 5 parties. Total party hours, 37 (23 on foot, 14 by car); total party miles, 170 (18 on foot, 152 by car). **Total species, 90; total individuals, 8804.** (Seen in area during count period but not on count day: Screech Owl, Brown Creeper, and Eastern Bluebird.) The Scaup were Lesser.—Mrs. J. C. Barker Jr., Mrs. James Blaylock, Ruth Brown, Fred Conderman, Margaret Conderman, Allen Connelly, Robert Holmes (compiler), Mary MacLaurin, Allen Olmstead, Tom Sherratt, Sam Sweeney, Marjorie Warren.

North Wilkesboro, Wilkes County, N. C. (all points within a 15-mile diameter circle centered in North Wilkesboro; corn field, hay field, open pasture, mixed woodland, Yadkin River, town streets).—27 Dec.; 7 AM to 4 PM. Mostly clear with high cloudiness after 3 PM; temp. 26-55°; wind S 0-15 mph. One observer and one individual working own yard. Total party-hours, 8 (on foot); total party-miles, 8 (on foot). **Total species, 39; total individuals, 924.** (Seen in area during count period but not on count day: Red-headed Woodpecker.) The Horned Larks were Prairie.—Wendell P. Smith.

Raleigh, Wake County, N. C. (all points within a 15-mile diameter circle centered at the State Capitol building; practically same area as previous counts: lakes and small ponds 25%, pine woods 5%, mixed pine and deciduous woodlands 35%, deciduous woodland 20%, open fields 10%, pasture 5%).—27 Dec.; 7 AM to 5:30 PM. Partially cloudy in morning, clear rest of day; temp. 38-60°; wind 5 mph in early morning, calm rest of day; ground bare, lakes and small ponds ice covered except small areas of open water in large lakes. Twenty-five observers in 9 parties. Total party-hours, 72.5 (21 by car, 51.5 on foot); total party-miles, 254 (210 by car, 44 on foot). **Total species, 75; total individuals, 5150.** The Scaup were Lesser Scaup and the Rufous-sided Towhees were Red-eyed.—Miss Gladys Baker, G. G. Barber, Dick Barber, J. W. Chalfant, Mrs. J. W. Chalfant, Mrs. Charlotte H. Green, J. F. Greene, W. L. Hamnett, Miss Mabel M. Jones, Mrs. W. E. Kelley, Mrs. C. M. Kistler, John L. Lamson, Mrs. John L. Lamson, F. B. Meacham, Mrs. Jack Potter, Dr. John Rhodes, Mrs. John Rhodes, Mrs. A. J. Skaale, Mrs. Merle Showalter, Mark Thompson, Eugene Upchurch, E. W. Winkler, Mrs. E. W. Winkler, Mrs. D. L. Wray, D. L. Wray (compiler).

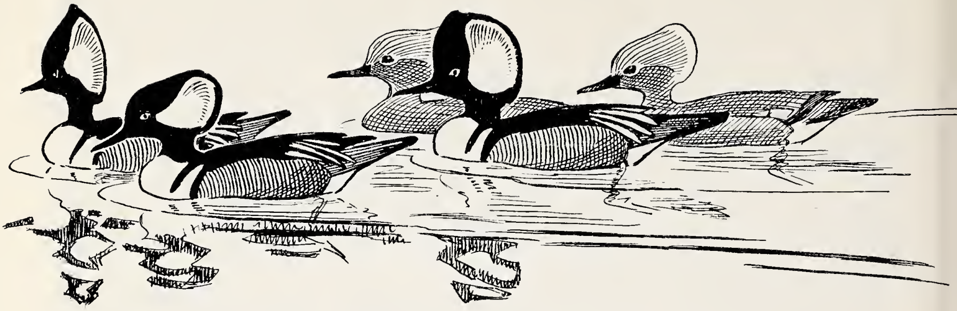
[In addition to the census published herein, a count was also made in Wake County for *Audubon Field Notes* by N. C. State Zoology students with the cooperation of Raleigh Bird Club members. Compiler James F. Parnell reported that 88 species and 7498 individuals were seen on the census taken 20 December. The area covered was similar to that used by Raleigh Bird Club, but the center was moved to include all of Lake Benson, a large and highly productive city reservoir. This apparently accounts for most of the additional species and the larger total number of individuals reported by Parnell. Species seen 20 December but not 27 December: Horned Grebe, Great Blue Heron, Canada Goose, Green-winged Teal, Shoveler, Greater Scaup, Redhead, Canvasback, Common Goldeneye, American Coot, Ring-billed Gull, Horned Lark, **Catbird (2)**, Water Pipit, Palm Warbler, Rusty Blackbird, Evening Grosbeak, Chipping Sparrow. Species seen 27 December but not 20 December: Marsh Hawk, Solitary Vireo, Pine Warbler, Common Grackle, Vesper Sparrow. Total species reported in Raleigh and vicinity during count period, 93.—*Ed.*]

Rocky Mount, N. C. (all points within a 15-mile diameter circle centered at Battleboro, N. C.; fields and roadsides 40%, lakes and ponds 20%, mixed woods 25%, swamps and marshes 15%).—1 Jan.; 8 AM to 5:30 PM. Cloudy and overcast; temp. 50-34°; wind SW 20-30 mph. Four observers in 1 party, 2 individuals working own yards. **Total species, 61; total individuals, 1994.** The recent extended freeze had driven most of the wildfowl off the rural ponds.—J. W. E. Joyner, G. Dan Knight, John R. Thomas, John L. Thompson (compiler).

Stanly County, N. C. (all points within a 15-mile diameter circle centered 2 miles NW of Badin, N. C.; mixed deciduous woodlands, open fields, farmlands, lakes and rivers, marsh, pine woods, city lawns, farm ponds and lakes).—28 Dec.; 6:30 AM to 4:30 PM. Cold and cloudy; temp. 22-54°; wind calm to moderate NW. Eleven observers in 5 parties, 16 individuals working own yards. Total party hours, 37.5 (11.5 by car, 5.5 by boat, 20.5 on foot); total party-miles, 163.5 (93.5 by car, 45 by boat, 25 on foot). **Total species, 74, total individuals, 6935.** (Seen in area during count period but not on count day: 1 Spotted Sandpiper (VW). This is the largest number of species since 1955 when 76 were counted. The most unusual find was the extraordinary number of Mallards (963) studied by four qualified observers from boats on Badin and Tuckertown lakes.—Roy Blalock, Mrs. Margaret Crawley, Mr. Barrett Crook, Mrs. Barrett Crook (compiler), Allan Culp, George Culp, Joe Ferebee, C. M. Haithcock, Mr. and Mrs. Louis Hartung Jr., Mrs. Myrtle Isenhour, Mrs. Ruth Kearns, Miss Barbara Maner, Donald Maner, Mr. and Mrs. James Mauney, Mrs. William Mount, Mrs. Heath Morgan, Mrs. J. E. Pennington, Spencer Plyler, Irvin Poplin, Mrs. L. A. Price, Mrs. Jim Thompson, Miss Sue Trott, John U. Whitlock, Mrs. Vivian Whitlock, Miss Bennie Winget.

Wayne County, N. C. [Formerly Seven Springs] (all points within a 15-mile diameter circle centered at Indian Springs in southern Wayne County to include Seven Springs, Mt. Olive and Sleepy Creek; fields and roadsides 45%, lakes and ponds 17%, mixed woodlands 20%, marsh and wooded swamps 15%, feeders 3%).—29 Dec.; 6 AM to 5 PM. Cloudy in morning, fair in afternoon; temp. 32-45°; wind calm in morning, 5-8 mph in afternoon. Six observers in 1 party. Total party-hours, 10.5 (7.5 by car, 3 on foot); total party-miles, 110 (100 by car, 10 on foot). **Total species, 70; total individuals, 1460.** (Seen in area during count period but not on count day: **Yellow-breasted Chat** visiting feeders in Mt. Olive.) **Catbird** and **Yellowthroat**, watched at length by all observers, are rarely seen in this area in winter. Winter Wrens are conspicuous by their absence.—David Siler, R. H. Siler (compiler), J. L. Thompson, J. R. (Bob) Thomas, Robert Thomas, Mrs. Margaret Walker.

Wilmington, N. C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction, including Wrightsville Beach, Greenville Sound, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, Greenfield Lake; mixed pine and deciduous woodlands 40%, beach and salt marsh 35%, fresh water ponds and river 20%, pasture 5%).—28 Dec.; 4:30 AM to 6:30 PM. Clear; temp. 31-53°; wind NE, variable 4-13 mph. Six observers in 4 parties, 1 individual working own yard. Total party-hours, 31.5 (16.5 by car, 15 on foot); total party-miles, 194 (173 by car, 21 on foot). **Total species, 135; total individuals, 10736.** (Seen in area during count period but not on count day: Pigeon Hawk, Red-cockaded Woodpecker.) The Scaup were Lesser. The large number of Shovelers (**300**) is unusual. Some scoters were seen, but the species could not be determined. The **Common Merganser** (MB, GM) is notable as are the 18 Red-breasted Nuthatches and the **Dickcissel** (BE), which was present regularly at a feeder 22-29 Dec.—Maurice Barnhill, Mrs. Dot Earle (compiler), Mrs. Betty Everson, Greg Massey, Mrs. Polly Mebane, Mrs. Marie Vander Schalie.



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Nature's subtile signs, which we read freely when backed by a letter from the North, told us in early December of the probability of an imminent invasion of crossbills—both the Red and the White-winged. By the end of the month both species had been seen in North Carolina.

We want the most complete information on these sporadic visitors that we can get, and by this note we **appeal to our readers** for a record of their observations from arrival to departure of Red Crossbills, White-winged Crossbills, Evening Grosbeaks, and Pine Siskins. Your report may be submitted in any form convenient to you. It should show all that you have been able to learn of the appearance, numbers, behavior, and feeding habits of these birds. The location and description of a night roost of the Evening Grosbeak would be of particular interest. Where permits are held, banded birds of any species should be captured and released after the band number is carefully recorded.

Mist-netting on the Outer Banks in the Fall of 1962, with a Banding Recovery from Florida.—From 29 September to 2 October 1962 we made a contribution to "Operation Recovery" by sampling the southbound migration on the Outer Banks of North Carolina. Previous mist-netting attempts on the coast have produced very few migrating land birds: in 1957, Davis (1958. *Chat,* 22:27) caught only 13 passerines in about 64 net-hours at Caffeys Inlet, and in 1958 Blake (Baird *et al,* 1959. *Bird-Banding,* **30**:149) caught only 3 birds in 48 net-hours at Morehead City. We were considerably more lucky, banding 61 birds in 88 net-hours near the village of Salvo, in Dare County south of the Pea Island National Wildlife Refuge.

We placed up to four nets in the belt of shrubby vegetation on the western side of Hatteras Island about two miles south of Salvo. Nine species caught were additions to the Hatteras Park list, as compiled by Quay (1959. *The Birds, Mammals, Reptiles and Amphibians of Cape Hatteras National Seashore Recreational Area*, 88 pp). Such new birds are designated with an asterisk (*) in the following list of species and individuals banded:

Mourning Dove 1, Yellow-bellied Sapsucker* 2, Brown Creeper 2, Carolina Wren 2, Mockingbird 5, Catbird 7, Brown Thrasher 4, Red-eyed Vireo 2, Nashville Warbler* 1, Parula Warbler* 3, Magnolia Warbler* 2, Cape May Warbler* 1, Black-throated Blue Warbler* 1, Black-throated Green Warbler* 1, Palm Warbler 2, Ovenbird* 1, Connecticut Warbler* 2, American Redstart 11, Cardinal 2, Indigo Bunting 9. (Total 61, of 20 species).

The Mourning Dove (*Zenaidura macroura*) banded on 29 September was recovered on 7 October 1963, ten miles northwest of Ocala, Florida, a straight-line distance of about 550 miles. Of particular interest were the two Connecticut Warblers (*Oporornis agilis*) and one Nashville Warbler (*Vermivora ruficapilla*) banded on 30 September. These secretive birds were photographed in color. Only a few records of either species in North Carolina exist, and neither has apparently been recorded on the coast (Pearson *et al*, 1942. rev. 1959. *Birds of North Carolina*).

Quay (*op. cit.*, p. 5) was able to spend little time on the Outer Banks in autumn, and noted that "the greatest deficiency [in his list] is in the transients" (p. 35). It seems clear from these bandings that there is much to be learned about migratory passerines on the Outer Banks and that mist-netting is a successful technique for discovering particularly secretive species.—JACK P. HAILMAN and JEREMY J. HATCH, *Department of Zoology, Duke University, Durham, North Carolina, 9 January 1964.*

Harlequin Duck Again Sighted in North Carolina.—On 4 January 1964, Margaret (Mrs. F. D.) Conderman and I saw a female Harlequin Duck (*Histrionicus histrionicus*) at Ft. Macon, on the Bogue Banks, Carteret County, North Carolina. Under usual circumstances I might hesitate to attempt to identify a female of this species in these waters. But we had the unusual advantage of studying the bird as it swam and dived off the tip of the rock jetties within 75 feet of us. In addition, it was feeding in close association with a Red-breasted Merganser and a Common Scoter so that we were able to clearly establish its small size. These two birds departed, but we observed the Harlequin Duck for some thirty minutes through a 60X Balscope and 9X35 binoculars in excellent light. Although we flushed the bird twice to be sure there were no wing markings, it was still there when we left. The characteristic facial markings and tipped up tail were noted.

To my knowledge, the only other record for the Harlequin Duck in North Carolina was the one—a male—reported by Maurice Barnhill at Carolina Beach on 30 December 1961 (*Chat*, 26:18, 1962). It may be that this species is joining the Purple Sandpiper as a bird from the far north which may be found with more regularity in winter about the rock breakwaters of our coast.

Since a specimen of the Harlequin Duck has not been recorded for North Carolina, the species remains on the state hypothetical list.—ROBERT P. HOLMES, M. D., *306 Country Club Drive, New Bern, North Carolina, 4 January 1964.*

Mississippi Kites in Hampton County, South Carolina.—On 17 August 1963, while birding near the town of Estill, Hampton County, South Carolina, I spotted some falcon-like birds over a cattle pasture just off a main highway. After watching them for a considerable time it became apparent that they were Mississippi Kites. There were six of them alternately gliding about and diving. The wing window and coloring of the birds were very plain.

The Estill community is approximately 100 air miles southwest of the site in Sumter County where concentrations of Mississippi Kites have been recorded in recent years (*Chat*, 25:69, 1961).—JOHN S. MOYLE, *1/Lt., VMF 333, Marine Corps Air Station, Beaufort, South Carolina, 17 November 1963.*

Feeding Behavior of Piping Plovers.—On one of my frequent trips with my husband to Hunting Island, Beaufort County, South Carolina, this one on 26 August 1963, I was fascinated by the manner of feeding of two Piping Plovers. The birds were on the sand at low tide at Fripp Inlet, about 40 yards apart, and I was standing between them. They would run a short distance, stop, extend one foot and pat the sand several times. Immediately they would probe into the sand two or three inches in front of the patted spot.

This bit of feeding behavior was new to me, but I understand that it has been published. Also, I have been shown an unpublished account of a similar performance noted by Paul Sykes and Henry Hespenheide on 27 March 1961 at Virginia Beach, Virginia. It follows, in part:

"For approximately 30 minutes we observed the rather interesting behavior of a Piping Plover. The bird would jab around in one small spot in the soft wet sand near the water's edge with one foot and then pick up with its bill the small organisms that apparently came to the surface as a result of the jabbing action. The fact that the sand was loosened by the jabbing, making it easier for the bill to penetrate the surface to get the organism, might also be taken into consideration. The bird was noted to use either foot in the process."—MRS. R. CONNOR TEDARDS, *Route 2 Brown Road, Anderson, South Carolina, 14 January 1964.*

Sight Record of a Red Phalarope in Charleston County, South Carolina.—On 15 September 1963 I observed a Red Phalarope (*Phalaropus fulicarius*) on a pond just south of the Wallace River and west of US 17 in Charleston County, South Carolina. The stubby bill and pale, unpatterned back were sufficient to separate it from the other Phalaropes. Though conditions were not ideal for photography several exposures were made to help confirm the identification. Mr. Lester L. Short Jr. of the Bird Section of the Bird and Mammal Laboratories of the Fish and Wildlife Service, felt that the color slide confirmed that the bird was a Red Phalarope.

Chamberlain and Sprunt in *South Carolina Bird Life* mention few records of the Red Phalarope, and most of these (one exception) were offshore. They state that the bird is accidental occurring from April to December. However, the three records cited are in the months December, March, and April.

A Lesser Yellowlegs was feeding with this bird and it was feeding in the same manner, that is, both birds were swimming and were picking at objects at or just below the surface of the pond. The Phalarope was not observed to "spin" as Phalaropes are known to do.—JAMES B. SHULER, *43 Kirkwood Lane, Greenville, South Carolina, 9 December 1963.*

A Scissor-tailed Flycatcher in North Carolina in 1960.—The following notes have been extracted from personal letters dated 27 September and 7 December 1963. The former contained colored photographs acceptable for identification.

During the first few days of April, 1960, on a mild but partly cloudy day, I was driving through a residential development in the southeast quadrant of Lincolnton, North Carolina, when I noticed a long-tailed bird sitting on a power wire about 50 yards from the road. Here, the area to the west and north is fairly well developed but to the east and south it is mostly a forest with some open fields. I stopped and walked across a field to a spot almost directly beneath the bird. My presence did not seem to disturb him in the least, and he appeared to be observing me as closely as I was him. After some minutes he flew off the wire, but apparently only to catch an insect as he returned immediately to the same position on the wire. He repeated this several times, and each time a definite scissoring of the long tail was noted in flight. He appeared to be feeding, as each flight was rather erratic.

After watching this bird for perhaps fifteen minutes, I ran to my car and drove home to get a camera. The trip took about twenty minutes, but he was still there in precisely the same spot when I returned. After taking some pictures, I stayed there for perhaps another thirty minutes, during which time he continued to make occasional short flights as described above, and I was able to observe him closely during all of this time and satisfy myself that he was a Scissor-tailed Flycatcher. A check with my books that evening showed that his markings were exactly as described for the male of that species. I was not able to return to the site until the following afternoon, and by that time the bird was gone and I was not able to locate it again.—WALTER CLARK, *1912 Augusta Road, Greenville, South Carolina, 7 December 1963.*

White-winged Crossbills at Greensboro, North Carolina.—On 28 December 1963, the day of Greensboro's Christmas Count, a flock of 18 White-winged Crossbills (*Loxia leucoptera*) was sighted by Larry Crawford, Thomas Street, Bruce Kappel, and the writer. As the group was emerging from an open marsh area—Horsepen Creek at the headwaters of Lake Brandt, about 3 miles northwest of the Greensboro, North Carolina, city limits—our attention was drawn to a flock of birds alighting in the tops of some hardwood saplings about 120 feet in front of us, near the edge of the marsh. The saplings were mostly tulip poplar, sweet gum, box elder, and sycamore, ranging from 20 to 30 feet high. Behind the saplings, a dense stand of Virginia pine provided excellent background for observation. All of the field marks of the White-winged Crossbill were observed: the rosy-red tint, the double wing-bars on black wings, and the black tail. After staying in the saplings for a minute to a minute and a half, the birds flew off in a southwesterly direction. The flock was composed primarily of males, although some females and/or immatures were noted. Several subsequent attempts by the writer to locate the flock and collect a specimen have proved fruitless.

Birds of North Carolina, 1959, lists four records for the state. In the one eastern record (Raleigh) specimens were taken. Apparently this constitutes the first sight record for the upper Piedmont area and for Guilford County.—BRAD HAWKINS, *Director, Greensboro Junior Museum, Greensboro, North Carolina, 10 January 1964.* (See the Christmas Counts elsewhere in this issue for other observations of this species.—*Dept. Ed.*)

Lark Bunting in Coastal North Carolina.—While birding the northern section of Bodie Island, Dare County, North Carolina, on 2 September 1963, W. A. Cooper and the writer carefully observed a Lark Bunting (*Calamospiza melanocorys*). We had just parked the automobile on the shoulder of the hard surface road about 2 miles south of Whalebone and had started into the fresh marsh when a passing vehicle flushed a light brown medium size "finch-like" bird from the shoulder of the road. The bird had conspicuous white markings in the wings. It disappeared about 15 to 20 feet from us in the high grass and we immediately moved toward the spot. Upon our approach the bird flew back to the shoulder of the road, alighting in front of our parked vehicle. The grass along the road had been recently mowed. The width of the mowed shoulder was approximately 10 feet, and the grass was 3 to 4 inches high. The bird seemed quite tame, allowing us to approach to within less than 7 feet. The bird was studied at distances ranging from 7 to 12 feet for a little over 5 minutes as it fed on the seeds of various grasses. While feeding, the bunting would often jump up, catch a stalk of grass in its bill, and bend it down to get the seeds.

The crown, nape, and rectrices were of uniform light brown. The back was light brown with faint streaks of darker brown running through it. The marking on the side of the head was rather indistinct. There was a dark line in the malar region. The eyelids were grayish. The greater wing coverts were white. The other wing coverts and the remiges were brown with smoke-gray margins. The scapulars were light brown with just a trace of red-brown. The breast, sides, and flanks were white with narrow dark brown streaks. In addition, on the flanks there was a trace of red-brown. A small dark spot was noted in the center of the breast, similar to but smaller than the "stick-pin" of the Song Sparrow. The bill was light blue-gray. The legs were light in color. We did not hear the bird utter any note.

There is one previous record for the Lark Bunting in North Carolina. Mrs. Roscoe Hauser Jr. (*The Chat*, 23:20, 1959) reported that she and several others observed a male in breeding plumage south of Fayetteville, Cumberland County, on 7 July 1958. The Lark Bunting has been recorded in the two states adjoining North Carolina on the Atlantic. There are two records of this western grassland species for Virginia. A specimen was collected at Lexington on 11 February 1932, by J. J. Murray (*The Auk*, 49:359), and a brown plumage bird was observed at Sandbridge, Princess Anne County (now Virginia Beach) on 5 September 1960, by H. A. Hespenheide and the writer (*The Raven*, 32:5). There are two definite records for South Carolina and the possibility of a third record. A specimen was collected by Arthur Wayne near Charleston, on 19 April 1895 (*South Carolina Bird Life*). I. S. Metcalf (*The Chat*, 20:62, 1956) reported seeing a bird on 9 February, and either the same or another individual on 12 February 1956, at Charleston in a suburban yard.

The writer wishes to express thanks to B. R. Chamberlain and T. L. Quay for their assistance.—PAUL W. SYKES JR., *1522 Lafayette Blvd., Norfolk, Virginia, 5 December 1963.*

BRIEFS FOR THE FILES

Common and Red-throated Loon, both species in large flights during November off Murrell's Inlet and Pawley's Island, Mrs. Ellison D. Smith. • **Horned Grebe**, 1 at Lake Katherine, Columbia, S. C., from 11 December through 13 December or later, apparently the first for the area since 1954, Mrs. Ellison D. Smith; 3 at Hartwell Lake, Oconee County, S. C., 3 January, Mr. & Mrs. Gaston Gage. • **Gannet**, very large numbers seen passing off shore at Murrell's Inlet, Pawley's Island, and Litchfield Beach, S. C., 9 and 10 November and again, 16 and 17 November (weekend visits), as many as 75 in sight at one time, moving throughout most of the day, Mrs. Ellison D. Smith. • **White-fronted Goose**, 1 at Gaddy's Pond, Anson County, N. C., 30 November, Robert J. Hader. • **Snow Goose**, 1 at Gaddy's Pond, Anson County, N. C., 30 November, Robert J. Hader. • **Blue Goose**, 2 at Gaddy's Pond, Anson County, N. C., 30 November, Robert J. Hader.

Fulvous Tree Duck, apparently a slim return this winter: 1 daily, 20 to 26 October, 3 present 17 to 23 November, and 4 to mid-January at Savannah River National Refuge, E. O. Mellinger; the lone bird that summered at Magnolia Gardens, Charleston, S. C., was killed by hunters when the season opened this year, Theodore A. Beckett III. • **Blue-winged Teal** reached White Pond, Kershaw County, S. C., by 28 September, Mrs. Ellison D. Smith. • **Shoveler**, 8 at Bear Lake, Jackson County, (western) N. C., 26 October, Richard H. Peake Jr., David Purser. • **Oldsquaw**, 7 at Lake Johnson, Raleigh, N. C., 11 January 1964, Robert J. Hader. • **Surf Scoter**, seven large separate flocks off Litchfield Beach, S. C., 5 and 6 October, Mrs. Ellison D. Smith.

Golden Eagle, 1 adult with captured Coot, watched at Magnolia Gardens, Charleston, S. C., 16 January, Theodore A. Beckett III. • **Black-bellied Plover**, 1 at Lake Johnson, Raleigh, N. C., 2 November, Robert J. Hader and J. M. Bates Jr. • **Great Black-backed Gull**, 1 adult, 2 immature at Ft. Macon, Carteret County, N. C., 28 October, Greg Massey. • **Yellow-billed Cuckoo**, nest with 2 eggs found 18 September, hatched 19 September; young destroyed, apparently by predator, at Effingham, Florence Co., S. C., E. C. Clyde. • **Pileated Woodpecker**, 1 near Pineville, Mecklenburg Co., N. C., 4 May, Mr. & Mrs. A. A. Kittinger, apparently the fourth sight record for the county. At least 3 were seen in same locale about a week later, reported by Joseph R. Norwood. • **Western Kingbird**, 1 at Hunting Island, S. C., 24 October observed catching insects, John S. Moyle. • **Swallows**, a considerable migration was noted at North Wilkesboro between 14 and 22 August: Tree, Bank, Rough-winged, Barn, and Cliff Swallows were seen, the Barn Swallows in relatively large numbers for the area, Wendell P. Smith. • **Common Raven**, 1 at Tuckasegee, Jackson Co., N. C. (elev. 1900), 19 October, Richard H. Peake Jr.

Red-breasted Nuthatch, a general invasion of the Carolinas to be reported in a coming issue. • **Short-billed Marsh Wren**, 1 near Presley Creek, Jackson County, N. C., 29 September, carefully observed, Richard H. Peake Jr. • **Swainson's Thrush**, 1, just north of Chapel Hill, N. C., 5 January 1964, Mr. & Mrs. Jack P. Hailman, Jeremy J. Hatch (see Christmas Counts for other winter observations). • **Orange-crowned Warbler**, 1 at Fayetteville, N. C., feeder, 28 December 1963; as many as 5 at widely separated feeders in same town during January, Mrs. Roscoe Hauser.

Baltimore Oriole, a strong migration was noted on the upper N. C. coast on 2 September, when 26 were counted on Pea Island and Bodie Island, W. A. Cooper and Paul W. Sykes Jr.; at Effingham, Florence Co., S. C., 1 was seen 19 December and 1 on 4 January 1964, both apparently were males, E. C. Clyde; at Fayetteville, N. C., they were first noted 28 September at feeder and later as many as two dozen were found in one yard, Mrs. Roscoe Hauser; at Clemson, S. C., one male appeared intermittently during the fall in the yard of Mrs. Krank Howard, where it was seen on 15 December feeding on dogwood buds by Gaston Gage. • **Rose-breasted Grosbeak**, 1 adult male watched singing at Lansing (elev. about 2800 ft.), Ashe Co., N. C., 18 June, Michael Welch. • **Dickcissel**, 1 adult male in Cullowhee Valley, Jackson County, N. C., 13 October, Richard H. Peake, Jr. • **White-crowned Sparrow**, 1 at feeder at Effingham, Florence Co., S. C., 3 December, E. C. Clyde. • **Lincoln's Sparrow**, 3 at one location, 7 October, and 1, 17 November (very late) all in Cullowhee Valley, Jackson County, N. C., Richard H. Peake Jr. *All dates 1963 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

BOOK REVIEW

The Birds of Nova Scotia. Robie W. Tufts. Nova Scotia Museum. 481 pp. Illus. Index. $7.50.

Anyone in eastern America interested in birds will find this book absorbing and a valuable asset to his bird library. No matter where you live in relation to Nova Scotia and the Atlantic seaboard you will soon recognize that many of the birds you know and observe are being also observed in this maritime Province. The distance from you to there should give further insight into the distribution and migratory habits of our common bird species.

Mr. Tufts' work is an annotated listing of 349 species and subspecies, 221 of which are illustrated in color. Descriptions are given for adults in breeding plumage. Ranges and descriptions are somewhat abbreviated. The illustrations from "The Birds of Newfoundland" done by Roger Tory Peterson, indigenous birds by John A. Crosby, plus line-drawings by John H. Dick make this book quite serviceable for reference and field use.—WILLIAM L. HAMNETT

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, \$1; Affiliated Club, \$2; Family, \$3; Supporting, \$5; Contributing, \$25; Life, \$100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of The Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat.* Subscription price to non-members is \$1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to the *Distribution Office*: N. C. State Museum, Box 2281, Raleigh, N. C. Please notify the Distribution Office immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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The Chat

Bulletin of The Carolina Bird Club

Vol. 28 No. 2 June 1964

The Chat

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Vol. 28 June 1964 No. 2
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BACKYARD BIRDING . . . . Annie R. Faver, Rt. 2, Eastover, S. C.
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Cover Photo—A male Yellow-shafted Flicker visits his nest in a Lombardy Poplar, Wake County, N. C. Photo by Jack Dermid.

CBC ELECTS NEW OFFICERS

Col. Norme Frost of Tryon, N. C., was unanimously elected president of The Carolina Bird Club at the Spring Meeting held at High Hampton Inn, Cashiers, N. C., 15-16 May 1964. He succeeds Harry T. Davis of Raleigh, who was given a standing ovation as he turned the leadership of the club over to Col. Frost.

Other new officers elected during the Saturday night business session include Richard (Sandy) Siler of Seven Springs, vice-president, and Thomas L. Quay of Raleigh, member-at-large. Joe Norwood of Charlotte and Charles Nichols of Anderson, S. C., will complete unexpired terms as vice-presidents. Members-at-large with unexpired terms are Col. I. H. S. Metcalf of Charleston, Wendell P. Smith of North Wilkesboro, and Jay Shuler of Greenville, S. C. Mrs. Kay Sisson and William L. Hamnett were re-elected as secretary and treasurer, respectively.

Other business included the annual treasurer's report (which is printed in full on the next page), display of a proposed CBC emblem, and a call for suggested locations for future meetings. Among places mentioned were Myrtle Beach, Whiteville, Nags Head, Bull's Island, Hilton Head Island, and Morehead City. Col. Frost will appreciate further suggestions.

The Cashiers meeting featured two excellent programs. Friday night Ernest Cutts of Charleston told about his recent trip to Antarctica and New Zealand. He showed appropriate color slides including many of New Zealand birds. Saturday night Col. Frost showed two excellent films. "The Changing Forest" told about the development of the Canadian forests following the retreat of the ice sheet which once covered that country. "Carpenters of the Forest" illustrated the courtship and nesting of several European woodpeckers.

Official registration reported by the Tryon Bird Club, host club for the meeting, was 177. This included members and guests from Maine, Ohio, Kentucky, Tennessee, and Florida.

Ed Marrow of Tarboro and Bill Hamnett took the count of species seen on the field trips. The 95 species reported included such rare treats as a flock of seven Red Crossbills and a Horned Grebe in breeding plumage. The crossbills alighted in an evergreen just outside the dining room while the Saturday morning "early birders" were having coffee and donuts. The grebe was discovered on a small pond by Arthur Stupka. Nesting was under way at High Hampton, and a Solitary Vireo incubating eggs near the inn was a popular attraction. Hummingbird, Song Sparrow, and Least Flycatcher nests were also located on the inn grounds.

Exciting birding, excellent cuisine, and warm fellowship made the Spring Meeting truly memorable. Tryon Bird Club members are to be complimented on their careful preparation for the meeting and their warm hospitality.

[illegible]
JUL 20 1964

TREASURER'S REPORT FOR CAROLINA BIRD CLUB, INC.

Period of: 1 April 1963 through 31 March 1964

CASH BALANCE 1 April 1963		$2,129.94	
CASH BALANCE 31 March 1964		2,752.61	
INCOME FROM DUES, ETC., SAME PERIOD			$2,522.42
EXPENDITURES, SAME PERIOD			1,899.75
EXPENDITURES:			
1. Audubon Society Scholarship			115.00
Miss Geraldine Cox			
(Mr. and Mrs. L. B. George)			
2. The Chat			$1,174.04
March 1963	$294.70		
June 1963	137.61		
Sept. 1963	274.92		
Dec. 1963	289.12		
Postage & Phone	14.62		
Typing help	101.00		
Bulk mailing	20.00		
Addressograph	3.49		
Editor supplies	35.18		
Returned Chats	3.40		
3. Newsletter			$ 70.26
Envelopes	50.25		
Paper	4.21		
Addressograph	4.95		
Stamps	10.85		
4. Office materials & supplies			$ 5.00
Stamps	4.00		
Check book	1.00		
5. Miscellaneous			
Audubon Soc. Dues	15.00		$ 535.45
Treasurer's Bond	5.00		
Convention badges	15.45		
Transferred to Savings	500.00		
IN CHECKING: 31 March 1964		$2,752.61	
IN SAVINGS: 31 March 1964		3,083.74	
Treasury of C.B.C.		$5,836.35	

Respectfully submitted,
William L. Hamnett, Treasurer

NEWS AND COMMENTS

Audubon Field Notes has been without an editor for the Southern Atlantic Coast Region since the resignation of Ivan R. Tomkins approximately a year ago. Fortunately James F. Parnell, who recently received his doctorate in zoology from N. C. State, has accepted the post. Jim has also accepted a position on the faculty of Wilmington College. This summer Jim and his wife will spend two months in Costa Rica while he studies at the University of Costa Rica's Institute of Tropical Biology.

Save Those Back Issues!

Harry T. Davis reports that many libraries and new CBC members are requesting complete files of *The Chat.* Unfortunately several early issues are no longer available, and supplies of some recent issues are dangerously low. Members who are willing to donate back copies to the club for resale are urged to turn them over to Mr. Davis at the N. C. State Museum, Raleigh, N. C. Postage paid envelopes will be furnished upon request.

Request for Data on TV Tower and Ceilometer Kills

The March-April 1964 *Audubon Magazine* carried an interesting article titled "A Tower for TV: 30,000 Dead Birds" by Charles A. Kemper. Dr. Kemper, who majored in zoology while a premedical student at Duke University, of course deplores the mass kills of migrating passerines, but at the same time he can see such events as valuable opportunities for ornithological investigation. CBC members who live near TV towers and ceilometer-equipped airports are urged to check these areas as early as possible in the morning when nights are overcast during spring and fall migration. Early arrival is very important because, as Dr. Kemper points out, the scavengers do not wait until dawn. Reports may be sent to Rhett Chamberlain or Eloise Potter.

Peterson on Pesticides

Testifying in Washington 22 April, Dr. Roger Tory Peterson warned that not only the Bald Eagle but the widely admired Osprey and other fish-eating birds are seriously threatened because insecticide poisoning is destroying their ability to reproduce.

The noted ornithologist and conservationist told the investigating subcommittee headed by Senator Abraham Ribicoff that a colony of Ospreys at the mouth of the Connecticut River had declined from 150 breeding pairs

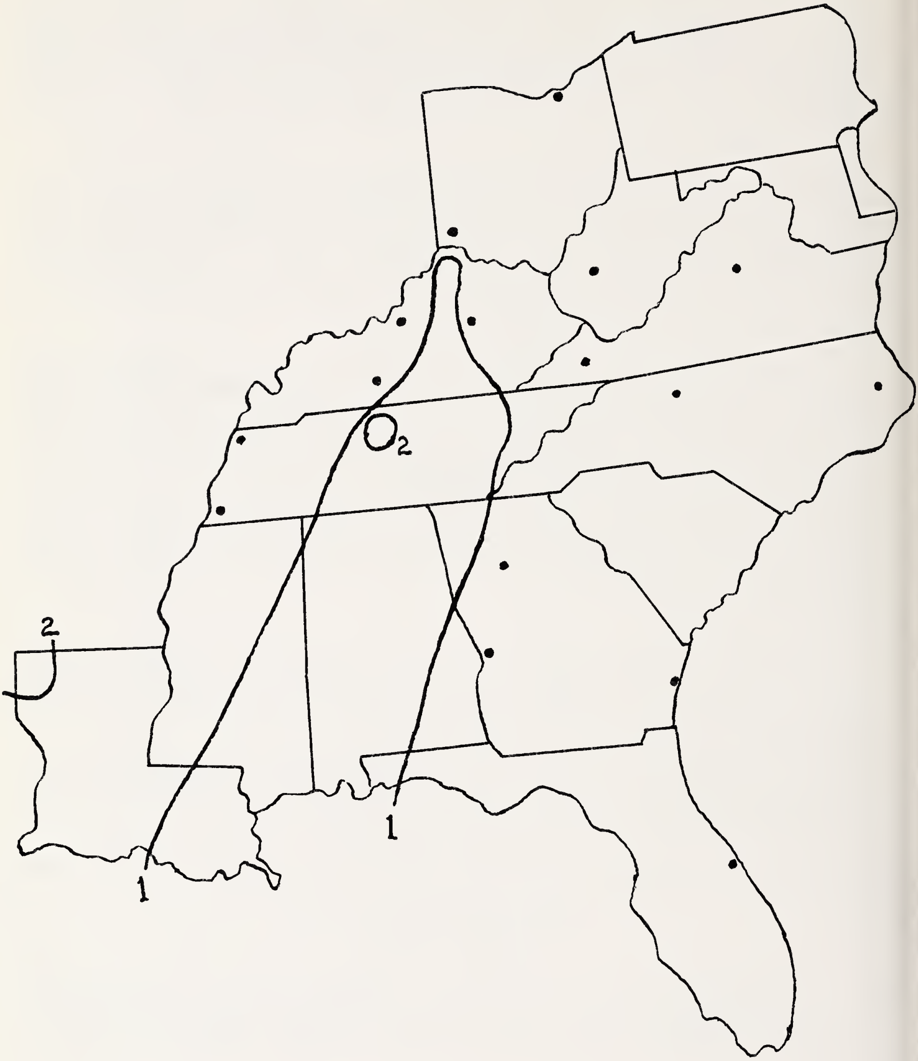
(Continued on page 58)

IN MEMORIAM

Rachel Carson

Carolina Bird Club members join conservationists throughout the world in mourning the untimely death of Rachel Carson, the noted biologist and writer who died of cancer 14 April 1964 at the age of 56.

The Board of Directors of the National Audubon Society acted 28 April to establish a Rachel Carson Memorial Fund for Research and invited contributions in honor of the courageous author of *Silent Spring.* The money will be used to sponsor research into the mysteries of the world of nature and particularly into problems caused by the introduction of man-made poisons into the natural environment.



WINTER RANGE OF BEWICK'S WREN

Line 1 encloses area with mean of 1-4 birds each winter, Line 2 mean of 5 or more. Dots show stations with means of less than one per winter.

BEWICK'S WREN AND ITS WINTER RANGE

By Charles H. Blake

One of the unexpected results of bird banding at Hillsboro, N. C. has been the taking each fall of about two Bewick's Wrens (*Thryomanes bewickii*). It is possible that two different subspecies are involved: *T.b. bewickii* which breeds west of the Appalachians and much more probably *T.b. altus* breeding in the Appalachian region from central Pennsylvania southward, northwest of it in Ontario and Ohio and southeast of it from Virginia to central South Carolina. The fifth edition (1957) of the A.O.U. Check-list is not very helpful in understanding the winter ranges.

T.b. bewickii is said to winter south to the central Gulf Coast with the implication that it may winter nearly to the northern limit of its breeding range. *T.b. altus* is said to be resident and also casual in winter south and east of its breeding range.

As an experiment I examined the Christmas Counts of the states from Ohio and Pennsylvania south to the Gulf Coast from Louisiana eastward. *Audubon Field Notes* for April 1958 to April 1963 were used and the map is based on the average number reported by those Counts which were taken in at least five of the six winters. Thirty-three stations were usable of those actually reporting Bewick's Wrens. Naturally there is no way to distinguish the two subspecies in these reports.

One conclusion is clear: *altus* is not really resident in the northern part of its range nor east of the Appalachians. It also seems certain that this race withdraws westward as much as southward. The two subspecies, east of the Mississippi, winter in a strip from north-central Kentucky to the Gulf Coast between eastern Louisiana and extreme western Florida. It is possible that *T.b. bewickii* is also concentrated west of the Mississippi from Arkansas south, but I have not examined this point in detail. In this area it might overlap the winter range of a third subspecies, *T.b. cryptus*. It is unlikely that *T.b. altus* normally winters west of the Mississippi.

This method does not allow fine distinctions to be made in abundance but it does seem to give a clearer picture than a general statement of the extreme limits of the winter range.

Box 613
Hillsboro, North Carolina 27278
17 January 1964

Backyard Birding

ANNIE RIVERS FAVER
Department Editor

This was really an ideal winter for Backyard Birding with the influx into the Carolinas of the birds of the far north. Many of us had as regular guests at our feeders species that we had never even seen before. Crossbills, Siskins, and the Evening Grosbeaks shared honors with the more familiar Purple Finches. There were even rumors of Pine Grosbeaks. These unusual visitors drew many people to our homes to see them at our feeders. Groups of Boy Scouts and Audubon Junior Club girls and boys gathered at my home to see for the first time the beautiful Evening Grosbeaks. Almost as fascinating was the presence of the Red-breasted Nuthatch. Pine Siskins were glimpsed in Columbia, but none at any feeder that I knew of. So the following letter was intriguing:

Connemara Farms
Flat Rock, N. C.
March 31, 1964

Dear Mrs. Faver:

Toward the last of February we noticed some new visitors at our feeders, little grey-brown streaked birds about the size of a Goldfinch, with very sharp, acute bills, touches of yellow at the base of the wings and tail, and a yellow stripe on the under-surface of each wing. All the authorities I have read neglect to mention this under-wing stripe of the Pine Siskin, but they may not have seen these birds perform at their window feeders. The first Siskins were quiet and peaceful, only interested in food, and we believe that these were the females. The more colorful Siskins, those with larger yellow wing and tail patches, proved to be very aggressive which is usually a male characteristic. They are the ones who have put on a real performance for us this past month, with their habit of fluttering or raising the wings, often quite high, showing the colorful yellow stripe. Siskins eat in Goldfinch fashion, with head bent close to the floor in contrast to the Purple Finches. If another bird comes too close to a male Siskin, the wings barely flutter at first, in warning, and if there is no retreat, the wings are raised high, the sharp bill pointed threateningly at the intruder, and the angry Siskin tries to run it off the feeder. Sometimes a male Siskin will try to run a couple of other birds off as soon as he arrives at the feeder. They often fight among themselves, heatedly; we have seen them fighting with bill and wings three feet above the window feeder. After we put a glass roof above the window feeder there was no more of this, as the quarrelsome ones had to fly out instead of up to fight. The roof also helped the Purple Finches, who took to it instead of flying away when there was trouble.

The peace and content of the Purple Finches and Evening Grosbeaks here was sadly disturbed by the Siskins. At first it never entered our heads that so tiny a bird could disrupt the tranquil harmony of the feeders. When we saw a little Siskin, with raised wings and pointed bill, run threateningly up to an Evening Grosbeak, at least three times its size, it looked absurdly spunky, and seemed something more on the comical side than otherwise. After a while, when we noticed fewer Evening Grosbeaks each day, until finally none came to the feeders any more, we were no longer amused. The Purple Finches used to come to the window feeder in crowds of 25 to 30; now, we usually see only half as many. However, I believe the birds are adjusting. There seem to be more Finches now than a week ago, and since the Easter snow we have had two female Grosbeaks, after a two weeks absence.

There has been less trouble at the large pipe feeder. This was designed by my mother so that it is almost square, (21" x 26") and has long glass hoppers on each side, facing each other, inside, and in the center is an embroidery hoop holding grit, for the birds need this, but in winter when the roads are frozen they find it difficult to get. The Finches and Siskins line up in front of the "bird mangers", as we call them, and the Siskins do not seem to want to squabble when feeding this way, probably because the food is all in front of them.

One Pine Siskin, more belligerent than the others, we always know by his temper and his larger, brighter yellow wing patches. He puts on a grand performance, for he wants half the feeder to himself, and has run so many other birds off that he has been named "Little Sassbox." Once he made the mistake of tackling a *male* Evening Grosbeak, who looked surprised, but refused to tolerate any such impertinence and snapped at him, so he left in a hurry. At the small feeder on my study window, which is unroofed, he occupies himself with the bacon fat, peanut butter, and raisins in a holder made of part of a plastic ice-cube container, but mainly with the sunflower seed in a half cocoanut shell. Purple Finches will perch four together on this shell, feeding, when he is not there. He cannot tolerate another bird on the other side of the shell, and defends it vigorously, sometimes fighting with bill and wing all the way to the ground, and always worsting the rash bird that takes him on. After such a fight he perches triumphantly on the shell, and gives a loud, victorious "peee-eek". If the feed is low in the shell, instead of bothering to fight, he jumps down into the middle of the shell, looking quite ridiculous, wading in seed.

The Pine Siskins are rather tame. I do my typing two feet away from the feeder at my study window, while they feed there, and they have allowed me to come almost up to the window before taking off into the pines or the dogwood near by. They have a feeding song distinctive of them, but really, at the feeder one hears more often the warring "peee-eek" cry, which varies to "queee-eek" or "queee-eet." I feel that I know Pine Siskins much better now than when I saw my first flock in Columbia, feeding under a chinaberry tree.

—MARGARET SANDBURG

Wishful Thinking: Sparrow-catching Shrike?

Mr. Fred Sample of Columbia suggests a wonderful solution to one of our problems in the following:

I have been plagued with English Sparrows the last few days, after not having had any for about eighteen years. I bought a sparrow trap and I recommend it to anyone who would like to get rid of, or at least, reduce the English Sparrows in their yard. (This trap costs about thirteen dollars, plus express.)

I have been rather successful in catching sparrows. The other day I noticed one sparrow in the trap. As I walked by a little later, I saw what I thought was a Mockingbird on the trap and it looked like it was trying to get in. Upon closer observation I saw that this bird was a Loggerhead Shrike. I watched him for some time as he would hop up on the cage, go to one side and then the other, all the time trying to get to the sparrow. As I walked closer, the shrike flew up into a small pecan tree and just sat there.

I got my rifle and shot the sparrow and then put it on top of the trap. I stood off a little distance and watched to see if the shrike would come down and get the dead bird, but it did not do so. I then walked back into the house and went to the dining room, which was fairly close to the trap, so I could observe what the shrike would do. But before I could get to the dining room window the shrike evidently flew down and got the sparrow, as it was gone! If I thought I could teach this shrike to catch English Sparrows *only*, I would try to feed it and encourage it to stay around our home.

From the Window of Mrs. T. Y. Baker

On December 28, 1963, I saw from the window of my home near Zebulon, N. C., a Red-breasted Nuthatch. At first I thought that surely I must be mistaken. Then he came again almost immediately and stayed on the top floor of the feeder eating cracked black walnuts long enough for me to be sure. Then another one came, snatched a piece of walnut, and flew away.

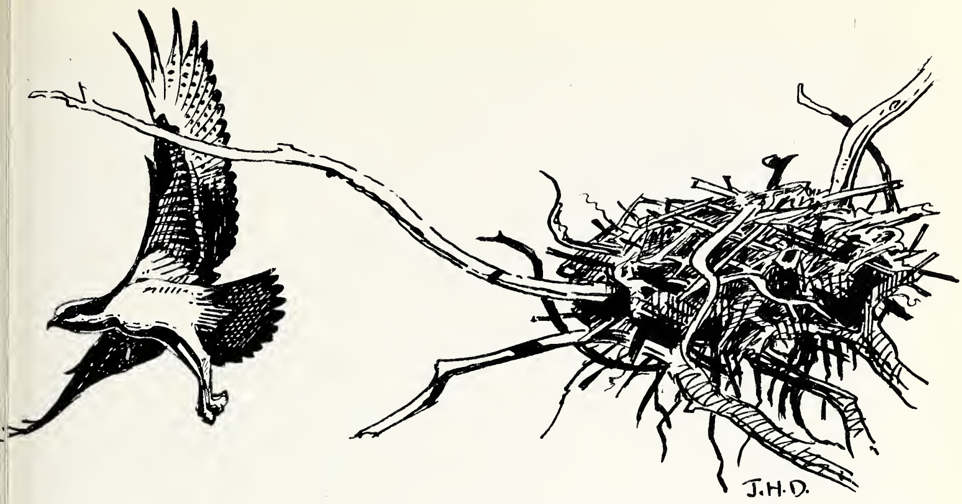
A half-dozen times they repeated this routine, one staying on the feeder to eat and the other taking his bit of walnut up into the high overhanging branches of the white oak. Then they both would disappear for two or three hours before returning with the same procedure, one staying several seconds to eat and the other snatching and flying. Occasionally they both came at the same time, and one would chase the other away. He chased the sparrows also, but he himself would fly from the Tufted Titmouse.

Both these nuthatches ate only walnuts until on January 4 one found the bread crumbs placed on the first floor of the feeder just below the walnuts. Is he a third nuthatch, or is he one of the original two getting tired of being chased? Or maybe he just wants bread with his meat. I have seen only two at any one time, but I keep wondering if there are three Red-breasted Nuthatches at my feeder.

Today, January 28, they are still here and going through the same routine with which they started.

From the Log of Critter Rest

31 March 1964. This morning at about ten o'clock I watched a Mockingbird perform the first full wing-flashing I have seen this year. The temperature was 47° and the bird was on the open lawn on the north side of the house. It flashed repeatedly with full wing elevation. About two weeks ago I saw a single "halfhearted" attempt at flashing—possibly by the same bird. Then the wings were not raised above the level of the bird's back. In each case the Mocker was apparently feeding. A good bit has been written but little is actually known about this odd behavior. B. R. CHAMBERLAIN, *Wadmalaw Island, South Carolina.*



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

In 1958 *The Chat* (22:38-40) carried a common name check-list of species of birds found in the Carolinas, based upon the 1957 A.O.U. Check-list. The 3,000 copies of the A.O.U. list were sold out by June 1961, and a "*Second printing with minor corrections, 1961*" was released shortly thereafter.

Volume 79 of *The Auk*, pps. 493-494, lists the "minor corrections" made in the second printing of the A.O.U. list, and we note among them the following three changes which should be made in our common name list to bring it into agreement with that second printing:

for Tropic-bird *read* Tropicbird
for Frigate-bird *read* Frigatebird
for Redwinged Blackbird *read* Red-winged Blackbird

Of interest to holders of either issue of the A.O.U. Check-list, we have noticed that the common name Gannet is not indexed in either.

Behavior of Captive Horned Grebe.—On 2 December 1963 a Horned Grebe which had been caught by fishermen on the North Carolina coast and brought to Zebulon, N. C., in a cardboard box was given to me by a friend. The bird was placed in a dishpan containing about one gallon of fresh water. Immediately it began to preen vigorously. Only after several minutes of preening did the bird attempt to escape. As soon as possible the grebe was moved to a bathtub about half full of fresh water. Here it proceeded to swim, dive, and preen some more.

Three apparently complete preening operations were observed, but notes were taken only on the third, which was the same as the first two except for minor variations. While the filthy conditions in the box may have influenced the sequence slightly, particularly in the priority given the caudal area, the careful attention given the breast, foreneck, scapulars, tertials, and back is probably typical since these feathers must be waterproofed if the diving bird is to survive. The grebe apparently did not preen its white secondaries at all, and it touched the primaries only briefly without spreading the wings. (Primaries and secondaries positively were not dressed at all in the first preening operation observed. The first operation gave more attention to breast and belly than did the third.) The Horned Grebe's wings are very short in proportion to its body size, and the remiges are barely visible when the wings are folded. Perhaps this, along with the species' reluctance to take flight, explains the apparent neglect of the remiges in the preening observed.

Unfortunately the time required for preening was not accurately recorded, but the bird worked very rapidly, finishing each operation in 10 to 15 minutes. Also it is unfortunate that the pecking of the uropygial gland was not recorded. Sometimes the pecking was done between the dressing of one group of feathers and the next. Sometimes the bird stopped dressing a group of feathers to get more oil and immediately resumed preening as if there had been no interruption. The feathers around the uropygial were usually stroked briefly in the process of getting oil from the gland.

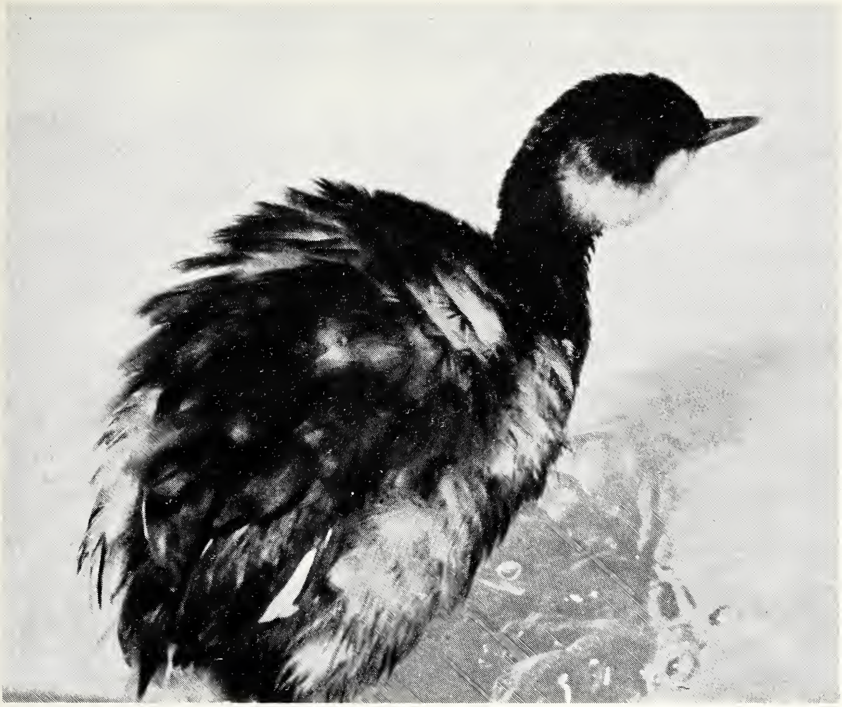
The grebe seemed to favor the left side as a starting point for preening each type of feather (e.g., left scapulars followed by right scapulars), but this did not always hold true, notably in the dressing of the primaries.

In recording the third preening operation I tried to note, in correct time sequence, the attention to each group of feathers or part of the body. Altogether 42 separate treatments were given to 12 distinct areas. They are tabulated below in the order of frequency of such treatments to those areas. There was no pattern or fixed sequence in changing from area to area. The attention given the unfeathered tibia and tarsus was particularly interesting. It has been noted before in some waterbirds. Three times during the operation the grebe raised its wings very slightly and fluttered them. On four occasions it shook its body vigorously, its feathers erected and its breast slightly raised from the water. Twice it spread its wings and flapped them rapidly while paddling with its feet, thus raising its body from the water into a vertical position.

Area Attended	**Number of Times**
Foreneck	7
Tertials	4
Head (by stroking against mantle)	4
Scapulars (once including upper wing coverts)	4
Primaries (briefly)	4
Back	3
Breast	2
Sides	2
Tibia/tarsus	2
Flanks (both)	1
Belly	1
Caudal Area (thoroughly)	1

This bird was very aggressive while in captivity. If anyone put his hand into the bathtub, the grebe would attack rather than dive, sometimes swimming from the opposite end of the tub to do so.

The bird refused to eat, probably because suitable food was not available. After several hours of observation the bird was given to Miss Gladys Baker, who arranged for it to be released on a farm pond the morning of 3 December. Mrs. T. Y. Baker Sr. saw the bird at intervals all that



A captive Horned Grebe erects his feathers and raises his body from the water as he preens in a bathtub. Note the white secondaries and how the black feathers of the mantle become white toward the base. (Photo by Jack Potter)

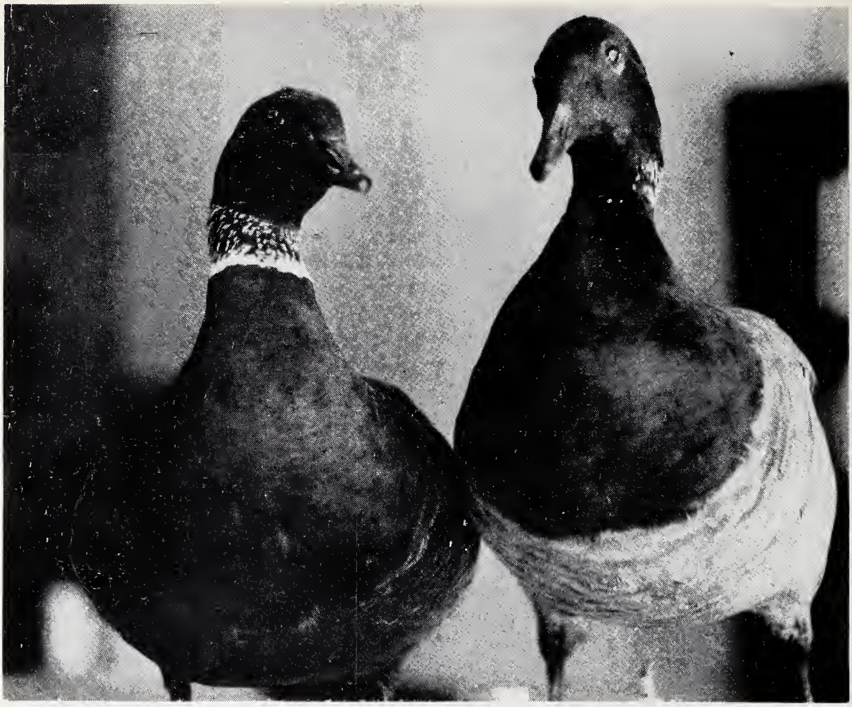
day as it swam and dived in the pond, apparently feeding. The following day the bird could not be located.

The writer is indebted to B. R. Chamberlain for assistance in organizing the preening notes for publication.—ELOISE F. POTTER, *Box 487, Zebulon, North Carolina, 6 January 1964.*

Black Brant, a Specimen for North Carolina.—Under "Brant", page 56 of *Birds of North Carolina* (1959), there is a prophecy, "NOTE: The Black Brant, *Branta nigricans* (Lawrence) [174], (Plate 7) is similar to the American Brant except its breast and belly are quite black and it has a white collar rather than a crescent patch. It is a brant of the Pacific Coast and is a straggler found on our coast."

George N. Lawrence first described this brant from one taken at Egg Harbor, New Jersey in 1846. Other specimens have since been recorded from Chatham, Massachusetts; Long Island, New York; and Cobb Island, Virginia. This bird breeds in the maritime regions of eastern Asia and northwestern North America—Siberia, northern Alaska, and northwestern Canada. This brant winters chiefly on the Pacific Coast to Lower California, with casuals noted from Wyoming, Utah, Texas and Hawaii.

The Bird Book prophecy was fulfilled on 1 January 1964, when veteran Coast Guard CPO Eugene B. Pond went "gunning" on Core Banks, North Carolina. Three brant came to his decoys while he was outside his blind. As



Mounted Back Brant, left, stands beside an American Brant. Note the difference in the collar markings of the two birds in addition to the darker underparts of the Black Brant. (Photo courtesy of N. C. State Museum)

the birds circled again, he lay down in the grass and shot one out of the flock. He doesn't miss and his Chesapeake retriever worked. He noted the bird's identity as the dog brought it in. This was easy because he had served a year in Alaska where he had hunted the Black Brant.

Mr. Pond, a member of Carolina Bird Club, gave the specimen to the State Museum where the female Black Brant is now mounted for exhibit. Thus there is a tangible record and one more bird added to the North Carolina list.—Harry T. Davis, *N. C. State Museum, Raleigh, North Carolina, 10 April 1964.*

Knot on Lake Mattamuskeet, North Carolina.—The note by Eloise F. Potter (*Chat*, 27:78-79) concerning Knots (*Calidris canutus*) in a non-beach habitat and the departmental editor's additional comments prompt me to report a Knot found lying on highway N. C. 94 about midway across Lake Mattamuskeet (Hyde Co.) on 1 September 1963. The bird was still alive, but immobile and had obviously just been struck by an automobile. Mollusca in the esophagus and gizzard, many of them still intact, were identified by Dr. Joseph P. Morrison, U. S. National Museum, as the clam *Gemma gemma* (Totten), and two snails, *Sayella chesapeakea* Morrison, and *Retusa canaliculata* (Say).

These molluscs live in brackish water, muddy sand habitat. Hence the following paragraph, quoted from Dr. Morrison's letter is pertinent to this subject: "Since the animals are still in some of the clams, this bird must have fed on these molluscs shortly before it was found. The total ecology of these two particular species of snails and of the clam indicates that they were picked up on a muddy sand beach or bar where the water is of reduced salinity. Since this bird probably was in southward migration on September 1, the nearest localities to the north of Lake Mattamuskeet, where all three of these molluscs are on record in the U. S. National Museum, suggest such localities as Chesapeake Beach, Maryland or the mouth of the Little Choptank River, Dorchester County, Md., as possible feeding localities. This bird's last feeding might have been nearer the coast in the neighborhood of Chincoteague, Virginia, or Lynnhaven Bay (Norfolk), Virginia, but we have no *Sayella* on record from those regions."

The Knot, a female in fall plumage, is deposited in the University of Georgia Department of Zoology Collection (UGa. #2208).—HERBERT W. KALE II, *Department of Zoology, University of Georgia, Athens, Georgia, 27 January 1964.*

A Baird's Sandpiper and Other Sight Records from the Outer Banks in the Fall of 1962. During slack periods in mist-netting from 29 September to 2 October 1962 (Hailman and Hatch, 1964. *Chat,* 28:28), we folded nets and made sight observations on migrating birds. Some of these observations are of interest, as they represent unusual abundances or new species to be added to Quay's (1959) *The Birds, Mammals, Reptiles and Amphibians of Cape Hatteras National Seashore Recreational Area.*

Of interest because of their abundance, were the following species:

COMMON SCOTER: 48 seen off Hatteras Bank 30 Sept. 1 male found alive, unable to fly, but able to swim, Hatteras Bank, 30 Sept.

SORA: at least 4 heard in swamp at Buxton, 29 Sept.

COMMON SNIPE: 1 near Salvo 30 Sept. and 2 Oct.

BLACK SKIMMER: a flock of about 200 at Oregon Inlet (north shore) seen 28 Sept. and 2 Oct.

DOWNY WOODPECKER: several heard each day 29 Sept. - 2 Oct. in thicket woodlands south of Salvo.

TREE SWALLOW: Many flocks of 100 or so seen. At least 1000 on Bodie Island, 2 Oct.

CLIFF SWALLOW: at least 1, probably more, seen at Bodie Island, 2 Oct.

BLACK-AND-WHITE WARBLER: 1 Buxton Woods, 29 Sept.

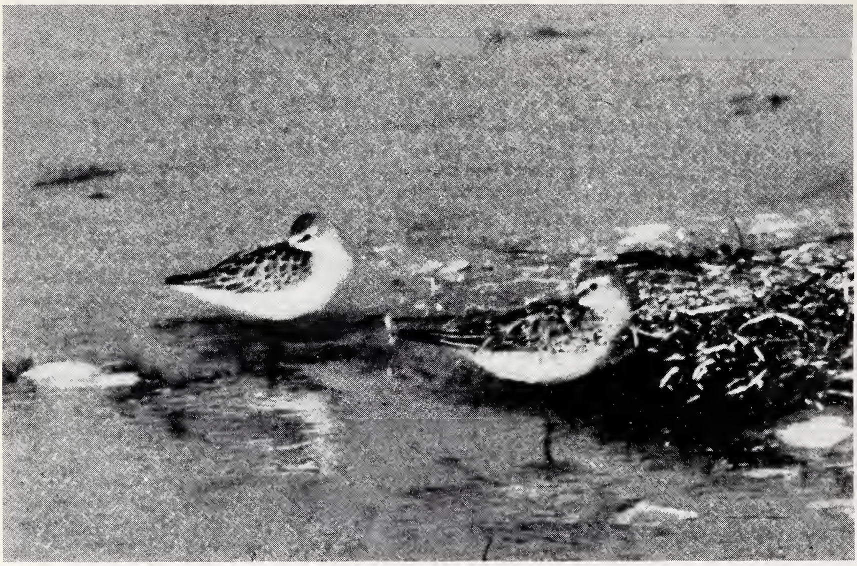
PALM WARBLER: flocks of 5-15 individuals seen daily near Salvo and at other places on Hatteras Bank 29 Sept. - 2 Oct. (2 banded). The most obvious migrating passerine.

AMERICAN REDSTART: 11 banded near Salvo 29 Sept. - 2 Oct. Of warblers in the woods, Redstarts appeared to be most abundant.

INDIGO BUNTING: 9 banded near Salvo, 29 Sept.-2 Oct. Commonly seen in thicket-woodlands.

Of birds new to Quay's (*op. cit.*) list in addition to those banded by Hailman and Hatch (*op. cit.*), we both saw a male ROSE-BREASTED GROSBEAK near Salvo on 30 September. Hatch observed a KENTUCKY WARBLER, also near Salvo, on 2 October. But the most interesting new species was what we believe to be a BAIRD'S SANDPIPER (*Erolia bairdii*) that we both observed for an extended period on 1 October at the tip of Cape Hatteras.

Baird's Sandpiper is accidental in North Carolina, and a study of Pearson *et al,* 1942 (revised 1959) *The Birds of North Carolina* reveals one well-documented record in September 1930 from Asheville. In November 1949 one was observed at Wilmington (Broley *et al, Chat,* 14:31). Accordingly, we report the following field marks: the bird was intermediate in size between Semipalmated and Pectoral Sandpipers both of which were present for comparison. Legs black; bill straight, black, of same relative length as Semipalmated; faint pale stripe on secondaries of wing; rump and tail



Baird's Sandpiper (right) and Semipalmated Sandpiper at tip of Cape Hatteras, N. C., 1 October 1962. Black and white print was made from a Kodachrome transparency taken with a 360 mm lens by Jack P. Hailman.

dark with a little white on sides; back mottled (not uniform nor striped); breast brown-gray grading into whitish belly; call, a single note rather like "kreep" of Sanderling. It had a more slender appearance than Semipalmated, a point not noted by Peterson (Eastern and Western Guides).

From our field notes and later inspection of color transparencies, we feel sure that the bird was a Baird's Sandpiper, although neither of us had seen this species previously.

These observations re-emphasize how much is yet to be learned about fall migration on the North Carolina Coast.—JEREMY J. HATCH and JACK P. HAILMAN, *Zoology Department, Duke University, Durham, North Carolina, 10 April 1964.*

Status of the Hudsonian Godwit in North Carolina.—The *AOU Check-list of North American Birds* (1957) lists the spring migration route of the Hudsonian Godwit (*Limosa haemastica*) through the central part of the continent, mainly west of the Mississippi River, and the fall migration route regularly west of Hudson Bay and in some numbers to the Maritime Provinces and the New England States, then southward over open ocean to its winter range in South America.

The *Birds of North Carolina* (1959 revision) lists this species as a rare migrant, based on a bird collected by J. B. Etheridge at Pea Island, Dare County, on 13 September 1911, which is now in the State Museum in Raleigh. Checking back through my records, I found an unpublished account of 2 Hudsonian Godwits M. T. Griffin and I observed at Bodie Island, Dare County, on 3 September 1958. Jack and Eloise Potter (*Chat,* 26:98) on 3, 8 and 11 August 1962, observed a bird at the pond by the Bodie Island Lighthouse. The bird was photographed on 11 August by Jack Potter. At this same pond on 5 August 1962, F. S. and H. A. Hespenheide and I (*Chat, ibid.* and *Audubon Field Notes,* **16**:467) observed what was apparently the same bird as that seen by the Potters. W. F. Rountrey (*Chat,* **27**:24) observed a bird at this pond on 15 September 1962, which might have been the bird observed at this location during August.

On 28 September 1963, I observed 5 Hudsonian Godwits in Dare County, North Carolina. In the morning, a bird in complete fall plumage was observed feeding on the nearly dry pond bed at the Bodie Island Lighthouse. Later in the day at Pea Island, 4 Hudsonian Godwits were seen feeding with a group of 6 Marbled Godwits, affording me excellent comparison of the two species. The four birds at Pea Island were in changing plumage. Most of the breast and belly were still rusty in color, with some black barring still present. These birds at Pea Island allowed me to approach to within less than 50 feet. When they flew, they would alight a short distance away on the mud of the almost dry impoundment and continue feeding. On both the Bodie and Pea Island observations, the flight pattern was carefully noted. With this number of individuals seen during the course of a day, it might be assumed that there was a good flight of this species off the coast during the later part of September.

These few sight records and the lone specimen taken at Pea Island, appear to be the only records of the Hudsonian Godwit in North Carolina.—PAUL W. SYKES JR., *1522 Lafayette Blvd., Norfolk, Virginia, 3 March 1964.*

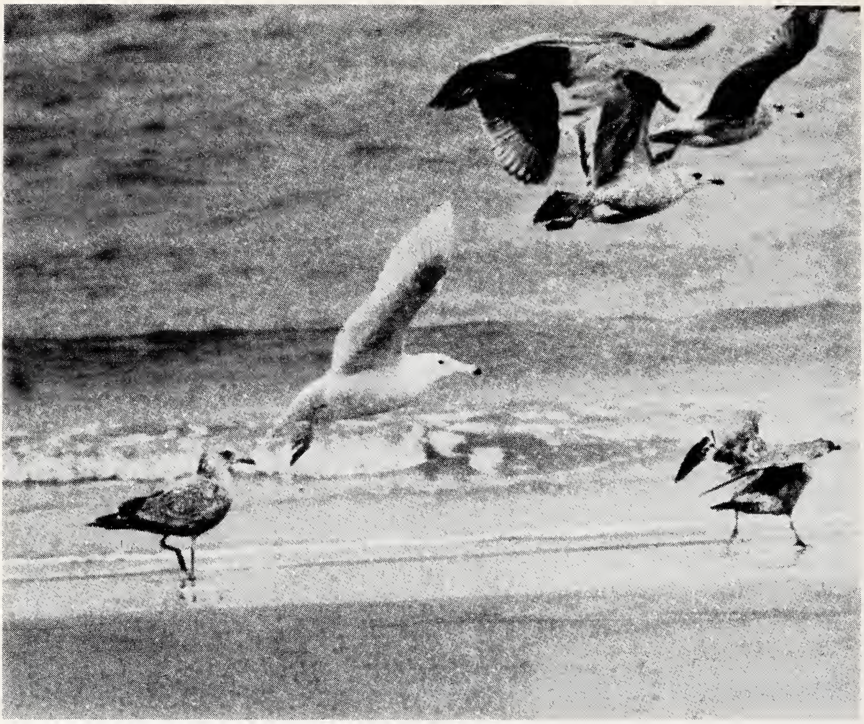
Ruff—the Retraction of a Sight Record.—The December 1962 issue of *The Chat,* p. 99, carries an account of the sighting of four Ruffs (*Philomachus pugnax*) in the North River marsh area in Carteret County, North Carolina, on 29 July 1962. The birds were watched at length and the several observers were convinced of the accuracy of their identification. Subsequent developments, however, cast reasonable doubt upon this record.

During the fall of 1963, a bird taken in the North River marsh area by the author of the 1962 report and sent to the N. C. State Museum to further substantiate that record, proved to be a Pectoral Sandpiper.

In view of these circumstances, it is necessary that the 1962 report be withdrawn.—*Dept. Ed.*

Iceland Gull Seen at Charleston, South Carolina.—During the mid-morning of 7 January 1964, Burnham and Rhett Chamberlain studied a white-winged gull for nearly two hours. The bird was noted in a flock of Ring-billed and Herring Gulls around the docks near the Shem Creek bridge on U. S. Highway 17, just outside of Mt. Pleasant, South Carolina. Using 8 and 10X glasses, we watched the bird as it flew nearby, perched many times on pilings or docked trawlers, and lit on the water (enticed, with other gulls, by bread thrown close in). Significantly, it appeared no more aggressive in its behavior than did the other gulls. On a number of occasions we were within thirty to forty feet, with both Herring and Ring-billed Gulls close to the apparently all-white bird. Only at the closest approach, with glasses, could I detect a faint cinnamon spotting on the upper wing coverts and a slightly soiled breast. Otherwise the bird was wholly white except for the legs, feet, and bill. The legs and feet were flesh-color, tinged with a faint purple. The bill appeared entirely black, but very near at hand the black seemed to grade into horn color at the head.

Direct comparison with immature Herring Gulls showed the white bird to be the same size, although the latter appeared a little heavier or sturdier in build. However, a distinctly noticeable difference was seen in the bills of the two species. "Our" white bird had a shorter, much more slender bill, and we are convinced it was an Iceland Gull (*Larus glaucoides*). This slender bill served to distinguish it from that other white-winged gull the Glaucous, that also occasionally wanders down our Atlantic coast.



A Glaucous Gull takes wing amid immature Herring Gulls at Tybee Beach, Georgia. The Iceland Gull seen at Charleston was similar in appearance but was smaller with a shorter and more slender bill. Note the shading of the underwing with unmarked white primaries. This pattern is common to both the Glaucous and Iceland Gulls. (Photo by Ivan R. Tomkins)

Forbush (*Birds of Massachusetts*, 1925) cites the length of bill in the Glaucous Gull as 2.15 to 3.00 inches and that of the Iceland Gull as 1.56 to 1.87 inches. Incidentally, this measurement in the Herring Gull varies from 1.95 to 2.50 inches.

As for coloration, Pough (*Audubon Water Bird Guide*, 1951) remarks that the young Glaucous Gull starts with a whitish bill with a dark tip that fades as the bird matures and then becomes yellow with red spots. Of the Iceland Gull he says, "The bill is at first uniformly blackish but becomes light greenish by the second year." This brings out the fact that our Shem Creek gull, practically all white and not yet showing any trace of gray hood or mantle (and judged to be in second year plumage) still retained its black bill. In contrast to this, an all-brown immature Iceland Gull in the collection of the Charleston Museum (42.56.4) has the distal half of the bill dark (but not black) fading into light horn at the head. Thus there appears to be individual variation in the time required to attain succeeding plumages.

Referring to the difficulties sometimes encountered in separating the Iceland and Glaucous Gull in the field, a number of writers emphasize that body size alone cannot be depended upon always since measurements of the two birds do overlap. Plumages may be practically identical, and in the matter of bill color, Forbush (*Birds of Massachusetts*, 1925) states that the Glaucous Gull has a "blackish" bill in the first winter and a "flesh-colored, black-tipped" bill in the second, and, as to the Iceland Gull, "young in juvenal plumage have the bill blackish, . . ."

The Iceland Gull has been recorded as far south as Florida (*Florida Bird Life, Howell,* 1932), and Tomkins (*Oriole,* 6:49-50) took a specimen 3 miles east of Savannah, Georgia in 1941. However, I do not know of a South Carolina specimen, and the present record is accordingly placed on our State Hypothetical List.—E. BURNHAM CHAMBERLAIN, *P. O. Box 3039, St. Andrew's Branch, Charleston, South Carolina, 15 April 1964.*

Razorbill at Bull's Island, South Carolina.—On Friday afternoon, 15 February 1963, while birding on the beach of Bull's Island, South Carolina with my friend Mrs. Jesse Newsom of Sandersville, Ga., we found a stranded Razorbill (*Alca torda*). We approached it cautiously but found it more or less sluggish, only walking away from us as we circled it to get between it and the ocean. I had seen Razorbills on Machias Seal Island off the coast of Maine and the bill of this bird was unmistakable. The breast, however, was a dingy brown and there was no sharp contrast between the breast and the upper part of the body. I was unfamiliar with oil-soaked birds, and this coloration puzzled me until later in the afternoon when we reported our find at the lodge. Mr. Mills, the manager, and his youngest son Holland brought the bird from the beach and washed it, removing much of the stain. It was fed fresh shrimp, and it survived the night and seemed lively until mid-afternoon the next day when we put it in a bathtub of water. About an hour later it died.

Apparently there was no previous record of a Razorbill at Bull's Island, and I was told that this specimen would be refrigerated and later sent to the Charleston Museum. I have been unable to confirm this by correspondence.

The weather on 15 February on Bull's Island was clear, bright and fairly warm. There was a light snow and some ice by the following night.—MARY ENLOE, *2705 Riverside Drive, Knoxville, Tennessee, 19 December 1963.* (Records at the Charleston Weather Bureau show that most of the first half of February 1963 was marked by very strong NE winds. This may account for the presence of this badly handicapped bird at Bull's Island. The normal winter range does not extend below the New Jersey coast. A few casuals have been recorded on the North Carolina beaches but apparently this is the second recorded appearance for South Carolina. *South Carolina Bird Life* [Sprunt and Chamberlain, 1949] records an oil-soaked Razorbill picked up alive on Pawley's Island, 12 January 1948. That specimen is in the collection of the Charleston Museum. As for the Bull's Island bird, a note from Mr. Mills dated 6 April 1964 states that he was not able to preserve the entire bird, but he has kept the head.—*Dept. Ed.*)

Starlings Observed Anting—On 3 March 1964, an unseasonably warm day, five Starlings (*Sturnus vulgaris*) were observed anting in a weed-grown orchard at Zebulon, North Carolina. Specimens were obtained of the moderately large black ants which had white stripes across their abdomens. An entomologist identified them as being of the genus *Formica,* commonly called Field Ants.

The birds stood close together around the mounds. Taking an ant in the beak, a bird would lift one wing slightly and twist the tail to the same side, simultaneously tucking the head under the wing with a rapid jerking movement. It was impossible to tell exactly where the beak was placed, but on a few occasions it appeared to be inserted among the tail feathers. The anting birds seemed unaware of the cries of other Starlings which alighted in a nearby tree, and they also were slow to take flight when approached by the observer. ELOISE F. POTTER, *Box 487, Zebulon, North Carolina, 11 April 1964.*

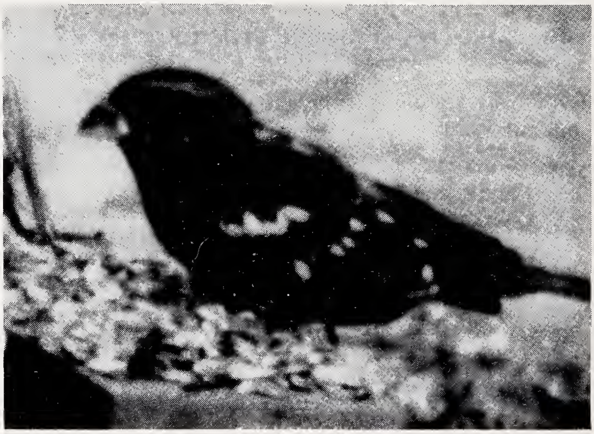
A Worm-eating Warbler in North Carolina in December.—This afternoon, 16 December 1963, as I opened my bedroom window on the second floor overlooking the drive, to throw a mealworm down to a female Cardinal, I saw a little olive-brown bird in the ivy at the base of the large Cedar standing close by. There were heavy head stripes, but I realized at once that it was not "just another White-throat." I got my field glasses and watched it through the open window as it went in and out of the ivy on the ground below me. Then I ran down stairs and out on the drive and watched it closely for some time. It continued to work through the ivy, occasionally moving to an open stem where I could readily see by its unmarked breast and dark stripe through each eye and each side of the crown that it was a Worm-eating Warbler (*Helmitheros vermivorus*).

The temperature here last night was down to 18 degrees. It is expected to go to 14 degrees by tomorrow. I noticed that the feathers of the bird were well fluffed out. It seemed to be searching for spiders much as the Carolina Wrens do. Finally it flew to another part of the garden, and I did not see it again.

Apparently the Worm-eating Warbler has never before been recorded in North Carolina in December. According to the A.O.U. Check-list (1957), northern Florida is the upper limit of its winter range.—ELIZABETH BARNHILL (MRS. EDWIN O.) CLARKSON, *248 Ridgewood Avenue, Charlotte, North Carolina, 16 December 1963.*

Black-headed Grosbeak—A New Species for North Carolina.—Shortly before 8:00 AM, on 6 January 1964, I saw in the pine tree outside my window what I took to be a Robin, its red breast shining in the morning light. But something in the way the bird was sitting made me reach for my binoculars, and when I saw that big, characteristic grosbeak bill, I was sure I had a bird new to me. It resembled an immature Rose-breasted Grosbeak—except for the red breast. Fortunately, it not only stayed all day, coming frequently to the base of a feeder just outside my door, but also stayed through the remainder of the winter, and, as of 12 April it is still present.

At the first observations I was unable to identify this strange bird. Then my neighbor, Mrs. D. G. Tipton, a member of our Piedmont Bird Club, saw it and put me on the right track after she located a picture of the Black-headed Grosbeak, a red-breasted male. With this clue I was soon able to convince myself that it was indeed a Black-headed Grosbeak (*Pheucticus melanocephalus*). The lack of stripes on the sides and underparts indicated



Immature male Black-headed Grosbeak photographed by Brad Hawkins at Greensboro, N. C., January 1964.

that it was an immature male. Confirmation came as more and more people came to see it. Among them were Mrs. F. H. Craft, Mrs. Margaret Y. Wall, Miss Ida Mitchell, Miss Charlotte Dawley, Bruce Kappel, Mrs. R. E. McCoy, and George A. Smith, who is quite familiar with the species after his frequent trips to the West. It still feeds regularly not more than ten feet from my observation post, enabling me to keep close tab on its appearance. A number of pictures have been taken of it, and Brad Hawkins' color slides have been shown at club meetings at Greensboro and Charleston, South Carolina.

The plumage changes over the past three months have been interesting. Upon discovery, the red underparts and nape, and the head with its three broad red-orange stripes, and the white spots on the wings, were conspicuous. By the first of April the head was almost entirely black. There was still a thin thread of color on the right side and a wider one on the left side of the head, but none down the middle. Now, 12 April, he is resplendent in his adult male plumage, except for a slight indentation of orange on the left side of his head at the posterior end of the original stripe. I have had but fleeting glances of his underwings, but they are clear yellow.

As for his food, he seems to have developed a taste for suet pudding as well as for the sunflower seeds he came for originally. He has also been observed eating ordinary privet berries and small berries such as are found in commercial wild bird mixtures. ETTA SCHIFFMAN, *2015 Bluemont Drive, Greensboro, North Carolina, 12 April 1964.*

Henslow's Sparrow at Laurinburg, North Carolina.—On 26 February 1964 I was birding in a low marshy area near the lake at St. Andrews Presbyterian College, Laurinburg, Scotland Co., North Carolina. This area is rather open but moist and filled with low bushes, small trees and tall grass. The find of the afternoon was the discovery of two Henslow's Sparrows (*Passerherbulus henslowii*). Presumably they were the subspecies *susurrans* as *P. h. henslowii* has never been recorded in North Carolina. When I watched these birds the light was very good, and the olive head and rufous colored wings were quite striking. The tail of one of them was noticeably shorter than that of the other.

On 3 and 4 March 1964 I again visited St. Andrews College to look for the Henslow's Sparrow, and on each day I found one bird. The bird seen on 3 March showed noticeably less olive shading on the head and more of a cream-buff color in the stripes on the side of the head than did the birds seen in February. The lines on the head of the bird found on 4 March were more distinct than on the others.

All four of these birds were flushed from tall grass or undergrowth. They would fly to the top of a tuft of grass or the limb of a small bush where they would remain for only a few seconds. They would then either fly to another limb or dart back into the underbrush out of sight. All of them were flushed within approximately ten to fifteen yards of the edge of the lake.

The 1959 edition of *Birds of North Carolina* (revision by Davis and Wray) contains no additional information to the 1942 edition, which carries Henslow's Sparrow as a spring transient and mentions 18 March (Raleigh) as the earliest arrival date. This indicates a rather early arrival for the birds I saw.—RICHARD E. PRICE JR., *P. O. Box 883, Laurinburg, North Carolina, 11 March 1964.* (It may be natural to presume that these February and early March observations are very early spring arrivals of the eastern race, which breeds in the State. It could be a mistake to overlook the possibility that they are winter occurrences of the western race, which is known to winter but a short distance from Laurinburg, in upper South Carolina. Too little is known of the status of Henslow's Sparrow in North Carolina.—*Dept. Ed.*)

A Fall List for Transylvania County, North Carolina. — While serving as resident naturalist at the Audubon Colony, 8 miles south of Brevard in Transylvania County, North Carolina, between 1 August and 25 August 1963, I observed the birds listed below. The Colony consists of some 900 acres of predominantly climax forest. There are several acres of pasture and open field as well as 5 man-made lakes. The altitude ranges from 2,800 feet to 3,320 feet.

Pied-billed Grebe
Green Heron
Mallard
Turkey Vulture
Cooper's Hawk
Red-tailed Hawk
Red-shouldered Hawk
Broad-winged Hawk
Bobwhite
Spotted Sandpiper
Mourning Dove
Yellow-billed Cuckoo
Barred Owl
Common Nighthawk
Chimney Swift
Ruby-throated Hummingbird
Belted Kingfisher
Yellow-shafted Flicker
Pileated Woodpecker
Hairy Woodpecker
Downy Woodpecker
Eastern Kingbird
Great Crested Flycatcher
Acadian Flycatcher
Eastern Wood Pewee
Rough-winged Swallow
Blue Jay
Common Crow
Carolina Chickadee
Tufted Titmouse
White-breasted Nuthatch
House Wren
Carolina Wren
Mockingbird
Catbird
Brown Thrasher
Robin
Wood Thrush
Eastern Bluebird
Blue-gray Gnatcatcher
Golden-crowned Kinglet
Cedar Waxwing
Starling
White-eyed Vireo
Yellow-throated Vireo
Solitary Vireo
Red-eyed Vireo
Black-and-White Warbler
Swainson's Warbler
Worm-eating Warbler
Golden-winged Warbler
Parula Warbler
Yellow Warbler
Black-throated Blue Warbler
Black-throated Green Warbler
Blackburnian Warbler
Yellow-throated Warbler
Chestnut-sided Warbler
Ovenbird
Louisiana Waterthrush
Kentucky Warbler
Yellowthroat
Yellow-breasted Chat
Hooded Warbler
Canada Warbler
American Redstart
House Sparrow
Eastern Meadowlark
Red-winged Blackbird
Common Grackle
Brown-headed Cowbird
Scarlet Tanager
Summer Tanager
Cardinal
Rose-breasted Grosbeak
Blue Grosbeak
Indigo Bunting
American Goldfinch
Rufous-sided Towhee
Chipping Sparrow
Field Sparrow
Song Sparrow

During the week of 4 August 1963, Dr. and Mrs. John P. Davis added the Orchard Oriole and Grasshopper Sparrow to this list.—Brad Hawkins, *Director, Greensboro Junior Museum, Greensboro, North Carolina, 10 January 1964.*

BRIEFS FOR THE FILES

Green Heron, 1 at Lake Katherine, Columbia, S. C., 8 April, early, Mrs. B. W. Kendall. • **Cattle Egret,** 1 at Lake Katherine, Columbia, S. C., 8 April, Mrs. B. W. Kendall. • **European Widgeon,** 1 at an inland pond near Charleston, S. C., 8 March, Edwin Blitch, Ernest Cutts. • **Oldsquaw,** a pair on Lake Murray, Richland County, S. C., 22 February, Mr. & Mrs. Robert Overing.

Bald Eagle, 1 well grown young in nest in pine near Huger, Charleston County, S. C., 8 March, B. R. Chamberlain, Paul W. Sykes Jr. • **Sora,** 1 in immature plumage picked up alive but apparently unable to fly, 15 August 1963, later released, North Wilkesboro, N. C., Wendell P. Smith. • **American Golden Plover,** 1 at Carolina Beach, N. C., in winter plumage, field marks carefully observed, 28 March, Robert J. Hader. • **Parasitic Jaeger,** 1 in Charleston Harbor, S. C., 7 March, Paul W. Sykes Jr.; 1, probably the same bird again in the harbor, 8 March, Peter Manigault. • **Dovekie,** 1 found dead on the beach near Ft. Macon, Carteret Co., N. C., 23 November 1963; 1 found alive but fatally wounded—apparently by gunshot—at Wallace Fisheries on Bogue Sound near Morehead City, N. C., 30 November 1963, John Fussell.

Chuck-will's-widow, 1 calling repeatedly on Wadmalaw Island, S. C., 22 March, B. R. Chamberlain. • **Chimney Swift,** 3 in St. Andrews Parish area, Charleston, S. C., 8 March, David Chamberlain. • **Ruby-throated Hummingbird,** 1, male at Wilmington, N. C., 18 March, Mrs. Polly Mebane. • **Gray Kingbird,** 1 at Edisto Island, S. C., 9 April, observed at length, Mrs. Paul Atwood, Mrs. J. B. Bernard, B. R. Chamberlain, Mr. & Mrs. Fred May. • **Eastern Wood Pewee,** 1 at Columbia, S. C., 5 April, an early date, Mrs. B. W. Kendall. • **Purple Martin,** 1 male at Wilmington, N. C., 11 February, Mrs. Sam Earle. • **Wood Thrush,** 1, apparently well at North Wilkesboro, N. C., 20 January, Wendell P. Smith. • **Orange-crowned Warbler,** 1 at suet feeder regularly, 21 March through 5 April, Raleigh, N. C., Robert J. Hader.

Dickcissel, 1 regularly at Wilmington, N. C., feeders, 22 December 1963 through 8 March, Betty Everson; 1 to 4 from 3 December 1963 through 8 March, Mrs. Birdie Menzer; in both cases associated with House Sparrows. • **Henslow's Sparrow,** 1 in open pine woods in upper Charleston County, S. C., 8 March, with pronounced greenish head, B. R. Chamberlain, Paul W. Sykes Jr. • **White-crowned Sparrow,** 3 immatures near Lake Raleigh, Wake County, N. C., 9 March, James F. Parnell. *All dates 1964 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

AN INVITATION

Carolina Bird Club members are cordially invited to join Audubon Society of Rhode Island for a weekend of exciting birding at Block Island 3-4 October 1964. The island is noted for huge and varied concentrations of fall migrants. Roger Tory Peterson will be present for the Saturday night program. For further details write Audubon Society of Rhode Island, 40 Bowen Street, Providence, R. I. 02903.

BOOK REVIEWS

Birds of the AEC Savannah River Plant Area. By Robert A. Norris. Contributions from the Charleston Museum, XIV, 1963. The Charleston Museum, Charleston, S. C., vi + 78 pp., 6 x 9 in., map, 6 habitat photos. $2.00, paper.

This is an annotated list of the birds observed and studied in an area of some 300 square miles bordering the Savannah River on the South Carolina side, a bit below the Fall Line and around 160 river miles above the city of Savannah, Georgia.

Four major habitat types within the area are briefly described and pictured. These are dominated by: cypress and black gum swamps, pinelands—mostly long leaf, fields abandoned to brush and grasses, and streams and ponds.

The period of the study extends basically from the late summer of 1955 to the late summer of 1958, during which time the author carried on field work as research associate and resident ecologist of the University of Georgia research group investigating the SRP area. A few scattered observations by earlier workers go back to 1951 and a considerable number by John B. Hatcher, Forest Manager, AEC, bring the records into the fall of 1962.

The list contains 213 species. Subspecies were considered only in a few cases, presumably through lack of time. In those few cases the investigations were characteristically thorough. An intensive study of the Savannah Sparrows in the area, published elsewhere, is briefly summarized here. Through netting and banding activities that provided 1758 records of Savannah Sparrows, *five* subspecies were clearly determined. As for the species, approximately 86 are shown to breed in the area; about 60 are transients; and 55 or more are winter visitants. The remainder are rare or accidental or were not found often enough to be definitely assigned to any of these groups.

The list includes many recoveries from a nearby 1300 ft. TV tower erected in 1957. More than 1100 birds of eighty-odd species were picked up there for study during the first fall after its construction. They provided most of the material for the determination of fat condition frequently shown. The notes also contain significant and interesting comments upon behavior of the species. Forty-nine plants, referred to by their common names in the text, are also listed separately with their scientific names—at least as to genus.

Dr. Norris, Ornithologist at the Tall Timbers Research Station at Tallahassee, Florida, is well known to students of ornithology through his numerous contributions in the leading journals, and in our section particularly, for his extensive participation in Burleigh's *Georgia Birds.* Many of our readers will recall his reports in *The Chat* while he was stationed at the Savannah River Plant.

The study is presented as a "preliminary list" with the stated hope that "it will become outdated with the accumulation of new observations of birds of the SRP area." It is a fine example of what can be accomplished in a small area in a very short time, and individuals or groups seriously planning to assemble and publish records of birds found in their area will do well to follow it as closely as they can.—B. RHETT CHAMBERLAIN.

Naming the Birds at a Glance. Lou Blachly and Randolph Jenks. Drawings by Sheridan Oman. Alfred A. Knopf, New York. 1963. 331 pp. Index. $3.95.

Any birder who has ever spent thirty minutes or more trying to identify a difficult sparrow or fall warbler will probably resent the title of *Naming the Birds at a Glance* and never give it a fair trial. However, this guide is obviously not written for people who attempt the more challenging aspects of bird study. It is, according to the dust jacket, written on the assumption that "Most people do not have the knowledge to classify the bird they saw (that is, as Sparrow, Finch, Thrush, Warbler, or whatever), and thus are not able to turn immediately to the proper grouping in the average field guide."

Emphasis in this new guide, which was field tested in a privately published earlier edition, is placed entirely on the color patterns. End paper keys give page references for birds having various color combinations. Many species are repeated because they have two or more striking color markings. All the plates are black and white with the text located conveniently on the opposite page. The drawings range from poor to excellent with the raptors in flight given considerably more detail than in the Peterson guide. Scientific names are omitted, and range information is extremely brief in most instances. No more than three birds are illustrated on each page, therefore individual drawings are much larger than in other guides. While the system should work very well for males in breeding plumage, many females and nonbreeding males would be very difficult, perhaps impossible, to identify using just this guide.

One feature should be helpful to inexperienced birders. Relative sizes are designated by three lines representing the House Sparrow, Robin and Common Crow. A mark on one of the three lines indicates the relative length of the species described. Measurements are not generally given.

The book is called "A Guide to the Eastern Land Birds from South Carolina west to the Rocky Mountains and north to the Arctic." It fortunately includes the House Finch—a western species similar to the Purple Finch—which was accidentally introduced on Long Island, N. Y., about twenty years ago and is apparently extending its range rapidly. It is difficult to understand why the prominent chin stripe of the Purple Finch was not mentioned as a field mark, since it would be almost impossible to distinguish female plumaged House and Purple Finches in the field without looking for the chin stripe. But of course, this isn't the kind of distinction one usually makes "at a glance." Omission of the introduced European Goldfinch, which has a very limited range in North America, is understandable. Absence of several western species which often wander eastward—Bohemian Waxwing, Western Tanager and Oregon Junco, for example—is a simplification of dubious value. Wanderers turn up at home feeders so often that even beginning birders need to be aware of their existence. More difficult to accept is omission of several sparrows and the McCown's, Smith's and Chestnut-collared Longspurs, all of which both breed and winter regularly in the area supposedly covered by the guide. The hybrid warbler forms, Brewster's and Lawrence's, probably are best omitted from this particular guide; but the absence of the Swainson's and Orange-crowned Warblers is most unfortunate.

Despite certain shortcomings, *Naming the Birds at a Glance* should be a useful guide for beginners who want to identify only the commonly seen land birds. Also many experienced birders who wouldn't think of parting with their Peterson or Pough guides may find the Blachly and Jenks approach a helpful supplement. Although I have not yet had an opportunity to test my theory, I think this color-keyed guide will be useful when people telephone and say, "I just saw a little yellow bird. . . ."—ELOISE F. POTTER.

(Continued from page 37)

in 1954 to only 15 pairs in 1964. "Projecting this decline," he asserted, "we should see the last nest in Connecticut in 1970 or '71—in only five or six years!"

Analysis of Osprey eggs that failed to hatch disclosed significant amounts of DDT, DDE and other derivatives of DDT. Thirty samples of fish taken from the nests all contained these poisons. Dr. Peterson described how the long-lasting pesticides build up in food chains to blast the animal at the top of the pyramid. "Traces of poisons ingested by little fish upriver —either in the runoff or through poisoned insects—make them easier prey for larger fish. Numbers of affected fingerlings compound their poisons in the predators, and it is the large fish that is wobbly, swimming near the surface, that is most likely to be caught by the Osprey, which transfers the accumulated poisons to its own tissues. Natural selection becomes unnatural selection."

Dr. Peterson told Senator Ribicoff that aldrin, endrin, dieldrin and all compounds of the chlorinated hydrocarbon complex should be banned because "it is impossible to keep these poisons from contaminating our entire environment so long as winds blow, waters flow and fishes swim." He also endorsed a recommendation made by Rachel Carson a year ago that Congress should create a Federal Control Board and vest it with enough powers to regulate the distribution and use of chemical pesticides. In addition he urged passage of the Pesticides Research and Labeling bill (H.R. 4487 or S. 1251) which would give the Fish and Wildlife Service added authority to investigate pesticides and require warnings on the labels if packaged pesticides are potentially dangerous to wildlife. This bill was reported favorably by the House Committee on Merchant Marine and Fisheries 21 April. Since various agriculture agencies and pesticide trade groups are expected to oppose the bill on the floor of the House, its passage may well depend on whether or not concerned citizens make their opinions known.

Saved Again

In late February Senator John Tower of Texas introduced an amendment to the farm bill which would have allowed the governor of any state to say when, where and by what means eagles could be killed. This rider would have taken regulatory power away from Secretary of Interior Stewart Udall, who has consistently opposed the taking of eagles from airplanes, and placed it in the hands of elected officials who are often far more interested in the regional political situation than in conservation.

Informed of the threat to the eagles, Roland C. Clement of National Audubon Society quickly rallied conservation forces to oppose the Tower amendment, which never left the committee. Senator Everett B. Jordan of North Carolina was informed of opposition to the amendment by John K. Terres of Chapel Hill. Senator Jordan replied that he firmly believed "this kind of proposal had no place in the farm bill." However, conservationists must be constantly on the alert for riders which will allow the slaughter of raptors, particularly the Golden and Bald Eagles, or endanger the many other species which must be protected if they are to survive.

Binocular Still Not Claimed

The binocular reported found at the Spring Meeting of CBC still has not been claimed according to the manager of High Hampton Inn. The glass will be sent to anyone who writes or telephones the inn giving an adequate description.

CUMULATIVE INDEX TO BE PUBLISHED

During the past several years Carolina Bird Club members have become increasingly aware of the need for a cumulative index to *The Chat.* Volumes 5 through 21 had never been indexed at all, and the annual indexes were becoming more inconvenient with the passing of each year. Funds were available for publication of a cumulative index, but no one seemed to have time to undertake the project.

When the present editor began working on her first issue of *The Chat,* she quickly realized that every issue must be indexed immediately to enable her to fulfill her responsibilities. Work was begun posthaste. Rhett Chamberlain helped in every way possible, even checking the manuscript against his file. Now the printed "Index to *The Chat,* Volumes 1-25" is about to become a reality. Copy has been sent to the printer, and it is hoped that the index will be ready for distribution in September. There will be no charge since all expenses will be paid by CBC.

To facilitate distribution, persons who wish to receive the index are requested to complete the blank printed below and mail it to the editor *immediately.* The lower portion of the blank will be your mailing label, so please print or type your name and address carefully.

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Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Supporting, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of The Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat*. Subscription price to non-members is $1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to the *Distribution Office*: N. C. State Museum, Box 2281, Raleigh, N. C. Please notify the Distribution Office immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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The Chat

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GENERAL FIELD NOTES ...B. R. Chamberlain, Rt. 1, Wadmalaw Island, S. C.
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Cover Photo—White Ibis photographed by Jack Potter. Details on page 117.

NEWS AND COMMENTS

In response to the request in June *Chat* that unwanted back issues be returned to the Distribution Office at the N. C. State Museum for resale, William P. Baldwin of Summerville, South Carolina, sent 37 copies. Mr. Baldwin explained that he was in the process of reorganizing his reference library and could not possibly keep all the books, journals, and leaflets he had acquired. Thank you, Mr. Baldwin. We hope other members will follow your example.

Christmas Count

Dates for the 1964 Christmas Count are 22 December 1964 through 3 January 1965. Reports must reach the editor by 15 January 1965 to be accepted for publication. Count forms will be mailed on or before 1 December to all compilers of 1963 Christmas Counts published in *Chat.* New compilers may obtain forms by writing the Editor, Box 487, Zebulon, North Carolina.

In Appreciation

CBC members continue to express their appreciation for the lovely drawings by John Henry Dick which grace the General Field Notes in each issue of *The Chat.*

Cumulative Index

Your Editor has been soundly reprimanded for suggesting that readers mutilate the back cover of the June *Chat* in order to request the cumulative index. Fully one-third of those responding have sent a facsimile of the form. Originals, typed duplicates, and photo copies are all welcome. The important thing is that everyone who wants the index receives it.

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Sykes Enters Graduate School

Paul W. Sykes Jr., a frequent *Chat* contributor, recently completed a three-year tour of duty with the U. S. Navy. He is currently enrolled as a graduate student in the Department of Zoology, N. C. State of the University of North Carolina at Raleigh. The tentative project for his master's thesis is a study of fall land bird migration on the Outer Banks. Incidentally, a note by Sykes was published in the July 1964 *Auk* concerning a Fulmar taken at Sandbridge, Virginia, the second record for the state and apparently the southernmost record for the Atlantic coast.

The Living Bird

If you are a serious bird student who would like to read something a bit more advanced than *Chat* or *Audubon Magazine* but not quite so technical as *Auk* or *Condor*, you will probably enjoy *The Living Bird.* The 1964 edition is the Third Annual of the Cornell Laboratory of Ornithology. Edited by Olin Sewall Pettingill Jr., director of the laboratory, this attractive paper-bound volume contains 11 papers dealing with such varied aspects of ornithology as penguins in the Falkland Islands, bird migration studied by radar, breeding behavior of the Sparrow Hawk, birds mentioned in English poetry, species formation in some wood warblers, and bird song during a solar eclipse.

Individual copies of the 1964 annual may be obtained by sending $4.00 plus 25¢ for postage and packaging to the Laboratory of Ornithology, Cornell University, Ithaca, New York. Each Supporting Member ($10 annually) receives the *Newsletter* and *The Living Bird.* Each Annual Patron (or husband and wife sharing the $100 patronship) receives one copy of every publication issued by the laboratory during the calendar year.

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See page 61 for further details about this publication

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THE HOUSE FINCH ON THE ATLANTIC SEABOARD: A NEW SPECIES FOR NORTH CAROLINA

Eloise F. Potter

In January 1940 Edward Fleisher of Brooklyn, New York, discovered in a local bird store a large cage containing 20 House Finches (*Carpodacus mexicanus*) offered for sale as "Hollywood Finches." Previously he had seen Bohemian Waxwings for sale in the same store; therefore, he decided that the time had come to put an end to traffic in protected American passerines. Fleisher wrote officials of National Audubon Society who referred the matter to the State Game Protector of the district. (Elliott and Arbib, 1953). The protector intimated that the sale was not illegal because the House Finch "is not protected in California nor is it native to New York State" (Fleisher, *Linnaean News-Letter*, 1[4]:1-2). Unconvinced, Fleisher wrote the then Bureau of Biological Survey and was later credited with having furnished the information which enabled the Bureau to stop illegal trapping and transportation of House Finches by the thousands from California to stores throughout the United States. In conversation with U. S. Game Management Agent Orin D. Steele, Fleisher (loc. cit.) strongly opposed the release of House Finches in the New York City area and asked that they be disposed of in some other manner. Subsequent discovery of House Finches both breeding and wintering on Long Island, New York, indicates that at least one of the local dealers probably released his stock following imposition of the ban against sale of the birds.

Early History

The first published record of the House Finch in the eastern United States appeared in a weekly newspaper column on ornithology edited by John J. Elliott for the *Nassau Daily Review-Star*, 23 April 1941. The bird, a highly-colored male, was discovered at Jones Beach, Long Island, 11 April 1941 by Richard B. Fischer and Robert Hines (Elliott and Arbib, 1953).

In March of 1942 Elliott found seven House Finches in the vicinity of a tree nursery at Babylon, Long Island (about 12 miles northeast of Jones Beach), and the first nest was found at the same location 28 May 1943. By 1944 other colonies were known to exist on Long Island at Hewlett, Lawrence and Westbury (Elliott and Arbib, 1953).

By the early 1950s there was evidence of peripheral spread. The first unimpeachable report of a House Finch off Long Island came from Tarrytown, New York (18 May 1948), and there were subsequent records from Ridgewood, New Jersey (1949) and Bedford and Armonk, New York (1951). A colony of 20 to 30 birds was found along the Long Island shore of Greenwich Township, Connecticut, in the winter of 1951-1952 (Elliott and Arbib, 1953).

During 1951 Elliott and Arbib (1953) estimated the eastern House Finch population at roughly 280 individuals. They commented, "The future prospects of the species in this region seem favorable." That they were justified in making such an appraisal is proved by the phenominal spread of the species along the eastern seaboard during the decade following publication of their paper.

Rapid Range Extension

The winter of 1955-1956 found the House Finch reported from northwestern Connecticut and west-central Massachusetts, south to the upper coast of New Jersey, west to the north-central part of the same state, and southwest to the Philadelphia area (James, 1963). By the late 1950s the

House Finch was a common, though local, visitor around Philadelphia. At suburban Ardmore, Pennsylvania, E. Wayne Marshall Jr. trapped and banded his first House Finch in December 1957 and his 500th in December 1962. Recorded between extreme dates of 5 November and 11 April, some of these birds were later retrapped in the Long Island-Connecticut area, indicating that a migratory pattern was emerging in the dispersal of the species (Cant and Geis, 1961). The House Finch was first known to reach Maryland in 1958 when a bird banded at Ardmore, Pennsylvania, 4 January 1958 was shot by a boy at Havre de Grace 6 April (Marshall, 1958). Spreading northeastward, the House Finch invaded the Boston (Massachusetts) area in 1960 (James, 1963).

First nesting was reported in New Jersey in 1959, in Pennsylvania in 1961 (James, 1963), and in Maryland in 1963 (Garland, 1963). The nest reported by Garland was located in ivy growing on the side of a building on the campus of Towson State College, Towson, Maryland. Garland (personal correspondence) reports that House Finches were observed at the same building 24 April 1964 and a nest was later found about 3 feet lower than last year. Thus far Towson is the southernmost known nesting site on the eastern seaboard.

First North Carolina Record

The winter of 1962-1963 was marked by a spectacular southward movement of wintering House Finches. On 10 November 1962 an adult male bird was trapped and banded in Washington, D. C. (Pyle, 1963). Daniel F. Keeney observed a House Finch in female plumage at Falls Church, Virginia, 2 December 1962, a first record for that state (Murray, 1963). This same winter the species reached approximately the same latitude on the Delaware coast (James, 1963) and even entered North Carolina.

A male House Finch was collected by the author at Zebulon, Wake County, North Carolina, 26 February 1963 (Potter, 1964). The bird was taken during a snowfall, with an accumulation of about 4 inches on the ground. The unfamiliar finch was first observed 22 November 1962, and it returned to the Potter yard, 5, 7, and 9 December 1962 and 26 January 1963. On these dates the bird was too wary to be collected. All observations occurred during inclement weather and coincided with a temporary increase in the number of Slate-colored Juncos (*Junco hyemalis*) in the feeding area. Apparently the House Finch was associated with a flock of wintering juncos which visited the feeders only in severe weather.

The finch was prepared by David A. Adams, then curator of the N. C. State Museum at Raleigh, who tentatively confirmed the identification. The specimen was sent to the U. S. National Museum where George E. Watson identified it as a male *C. m. frontalis*, "probably not fully adult since the red on the forehead is not well developed." Watson commented, "This is said to be the subspecies which is established in southern Connecticut, New York, and New Jersey, although very few specimens have been critically identified." The specimen is now USNM 477529, and a pair of House Finches from the west coast population was given the N. C. State Museum in exchange for the skin.

Recurrence in North Carolina

Two House Finches seen at Zebulon 12 and 13 February 1964 by Jack and Eloise Potter were probably driven to the sunflower seed feeder by a snowfall barely covering the ground. The birds appeared to be in subadult male plumage since the red was mostly confined to the forehead, throat and rump, as in the specimen collected in 1963. In an attempt to learn more about these finches, a banding station was established under guidance of the State Museum. Unfortunately the two House Finches did not return, not even during the light snow of 29 February. A banded Purple Finch

(*C. purpureus*) was noted among the 30 to 40 Purple Finches at the feeder with the House Finches. Although 22 Purple Finches were banded at the station between 22 February and 1 April 1964, there were no foreign retraps. This may indicate that the House Finches were associated with a flock of Purple Finches other than those wintering in the immediate neighborhood.

NATIVE HABITAT AS RELATED TO DISPERSAL

The 1957 AOU Check-list states that *C. m. frontalis* breeds from southwestern and south-central British Columbia, central western and southern Idaho, central northern and southeastern Wyoming, and western Nebraska south through California, central Sonora, northwestern Chihuahua, and western and south-central Texas; winters to Gulf coast of southern Texas.

Generally speaking, the race introduced on the east coast is accustomed to a hot and arid summer climate, although it is occasionally found in more humid areas (Salt, 1952). In its native habitat the House Finch is virtually nonmigratory; however, Salt notes that the birds do migrate from the northern and interior portions of their range. A search of recent Christmas Count reports from Massachusetts published in *Audubon Field Notes* (Cruickshank, 1963, 1964) reveals no sighting of the House Finch in either 1962 or 1963 on count days. Therefore, it seems as if at least the great majority of the House Finches leave the northernmost nesting areas on the east coast during winter months. However, it remains to be seen whether the birds will be able to extend their range through migration north of areas in which they can safely spend the winter and into the higher elevations of the Appalachians. Also it remains to be seen how far south the House Finch will be able to extend its range along the eastern seaboard. The south Atlantic states with their hot summers and mild winters are potentially an excellent habitat for the House Finch provided, of course, that the high humidity does not prove to be a limiting factor, particularly in the summer.

PRESENT STATUS

Published observations indicate that the House Finch is well established on the east coast. It is known to breed as far north as Massachusetts and as far south as Maryland. The westernmost report came from Berks County, Pennsylvania, in the winter of 1961-1962 (James, 1963), and the southernmost winter records are from Wake County, North Carolina. The species appears to occupy a coastal band nowhere wider than 150 miles and extending about 600 miles from Zebulon (about 400 miles southwest of original colony) to Boston (about 200 miles northeast of original colony).

While I can make no attempt to estimate the present population, some idea of abundance can be obtained by comparing recent Christmas Count figures with the Elliott and Arbib estimate of 280 individuals in 1951. The 1962 Christmas Counts published in *Audubon Field Notes* listed 1295 House Finches with some 986 of these observed in the Long Island area and adjacent parts of New York, Connecticut, and New Jersey—the site of original establishment—with only 14 scattered south of Philadelphia. The 1963 Christmas Counts listed 1818 with 22 noted south of Philadelphia. The 523 additional House Finches reported in 1963 represent an increase of slightly more than 40%, far too great to be entirely an accident of the census technique. Undoubtedly the House Finch population on the eastern seaboard is still growing and moving southward, although the major population remains around the site of original establishment.

Recurrence of the House Finch at Zebulon indicates that the number of individuals wintering in eastern North Carolina may very well increase rapidly during the next few years. Also there is a possibility that nesting will eventually take place in the State. Therefore, it seems advisable for observers in the Carolinas to learn the field marks of the House Finch and watch feeders closely, particularly when the ground is covered with snow.

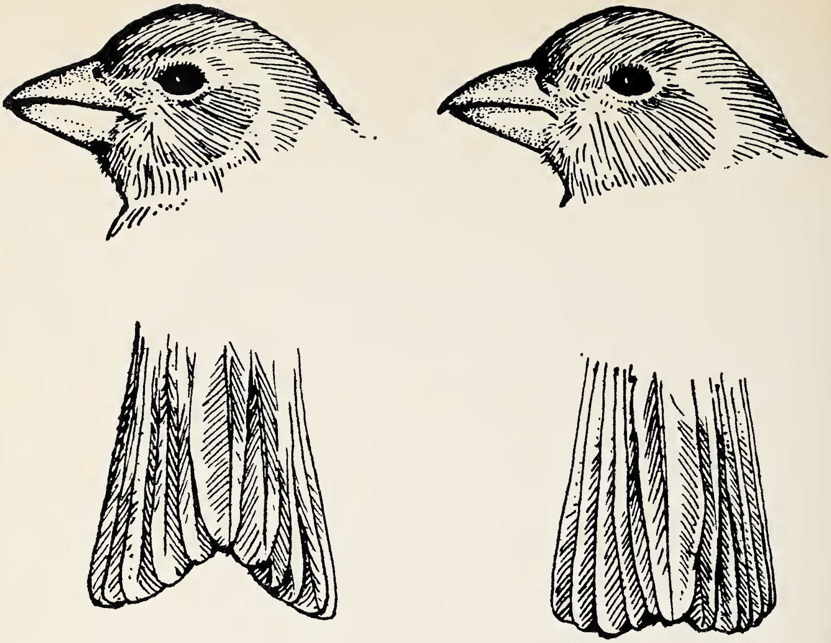

Figure 1. A (upper). Bill of Purple Finch (left) showing virtually straight upper line of the culmen. Bill of House Finch (right) showing convex line of culmen which gives the species a "Roman nose" profile. B (lower). Tail of Purple Finch (left) showing deep notch. Tail of House Finch (right). (Drawings by Will Hon)

IDENTIFICATION

Superficially the House Finch closely resembles the Purple Finch, which is of the same genus; however, the two species can be distinguished in the field even by persons unfamiliar with the House Finch. For the benefit of those who do not own a field guide to western birds, the House Finch is described below.

A good comparative discussion of the distinguishing field marks is given by Cant and Geis (1961). A more detailed description, of particular usefulness when the bird is in hand, is given by Blake (1955). The present account is adapted from both sources and augmented by my field experience.

Adult male: the red color of the adult male House Finch usually tends more toward vermillion in contrast to the raspberry color of the male Purple Finch. Perhaps the best distinguishing field mark is the presence of heavy dark streaking on sides and underparts below the red breast and extending into the belly. In the adult male Purple Finch the underparts are clear off-white with streaking, if present, usually faint and confined to the sides. Blake comments on the absence of reddish color in the greater wing coverts, back, and upper tail coverts, which emphasizes the fact that in the adult male House Finch the bright color is confined to the head, throat, upper breast, and rump. Blake also observes that the forehead of the adult male House Finch is bright red with a similar color extending along the superciliary line but not over the crown. This latter characteristic was, in my limited experience, very striking, marking the bird as something other than a Purple Finch even before the correct identity was suspected.

Adult female: The female Purple Finch has a pronounced white line over the eye and another extending downward below the cheek, with a well-defined dark brown patch between them and another brown patch forming a prominent chin stripe. The female House Finch lacks this distinctive head pattern. Females of both species are heavily marked below, the marks of the Purple Finch being more broken into spots and on a whiter background, while the House Finch tends to be more finely streaked with a dingier background.

Immature: Similar to female.

Size and shape: While very similar, the two species differ in that the Purple Finch is a short chunky bird, while the House Finch appears longer and more slender.

Bill: Cant and Geis describe the bill of the Purple Finch as having "the upper line of the culmen in silhouette . . . straight or virtually so," while in the House Finch "the culmen is markedly convex (in both sexes) giving the species an aquiline or 'Roman nose' profile" (Figure 1, A).

Tail: Deeply notched in the Purple Finch, much less so in the House Finch (Figure 1, B).

SUMMARY

The House Finch was probably introduced on Long Island, New York, in 1940 by the release of caged birds following imposition of a ban against their sale in local stores. The species quickly established itself on Long Island, and by the early 1950s a peripheral spread was in evidence; the late 1950s was a period of rapid range extension. The winter of 1962-1963 saw the House Finch move southward along the eastern seaboard in a spectacular manner, with first records being made at Washington, D. C.; Falls Church, Virginia; and Zebulon, North Carolina. Recurrence of the House Finch at Zebulon in February 1964 makes is seem likely that the species will become a regular winter visitor; therefore, it is recommended that observers in the Carolinas, particularly eastern North Carolina, learn the field marks of the species. Field marks of the House Finch, as compared with the Purple Finch, are given.

ACKNOWLEDGMENTS

Preparation of this paper has been possible only because many people gave unselfishly of their time, talents, and professional knowledge. I am particularly indebted to David A. Adams, who prepared the skin; George E. Watson of the U. S. National Museum, who critically identified the specimen; James F. Parnell, who read the manuscript and offered valuable suggestions for improving it; and Will Hon, who prepared the illustrations which add greatly to the usefulness of the section on identification. Others who have given less extensive but nevertheless significant assistance are Rhett Chamberlain, Charles H. Blake, Mel Garland, William L. Hamnett, and T. A. Beckett III.

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Box 487
Zebulon, North Carolina 27597
15 July 1964

EVENING GROSBEAKS: 1963-1964

B. R. Chamberlain

Following their biennial schedule, first extended into the Carolinas in the fall of 1951, Evening Grosbeaks came into our territory late in 1963. In keeping with the arrival pattern set in the earlier years, the vanguard was slim. It was not until January that they were to be found in any considerable numbers, and even at their peak appearances in mid-winter we received no reports of concentrations that exceeded 200 individuals. There were few that reached that figure.

The 1951 appearance of Evening Grosbeaks in the Carolinas was naturally an exciting event. They were "firsts" for both states and, as few of us had ever seen one of these hardy nomads, they were something to tell about. That was thirteen years ago. Today, excepting the faithful few, reports on the now commonplace birds must be sought after. In spite of this the present summary is drawn from data from 35 or more locations, well spread over the two states.

The overall picture seems clear enough. The 1963-1964 incursion was one of moderate proportions. The numbers were not high but the spread was fairly uniform and it extended to the coast. Most reports show upward to 15 birds feeding on sunflower seed on or under yard feeders. Where the sexes were indicated, the females generally were more plentiful. Peak numbers, such as they were, occurred briefly at various locations between January and March and in some cases snow flurries or cold were associated with the increase in numbers. At a few places the higher numbers held for most of the winter. As in previous major flights there was evidence of considerable wandering by sizeable flocks that kept on the move without evidence of a lack of food at the station abandoned. Conjecture might tie this action to the discovery of fresh treetop foods or other factors or to wanderlust—normal for the species. Whatever the cause, their actions are light-triggered indeed.

Every report sent in was helpful. Some of the more extensive ones can be reviewed here. The Southern Pines, North Carolina report leads this group. Repeating her laborious recording of the 1961-1962 incursion, which was particularly helpful in that summary, Mary Keller Wintyen has submitted an almost consecutive day by day account of the Evening Grosbeaks around Southern Pines from the arrival of 12 birds on 21 November until the departure of a lone female on 16 May. By the end of December the combined population around town was judged to be 100 or more. Totals ranging up to 200 were found from time to time throughout January, February, and March. The April attendance was appreciably smaller, dwindling to 40 or 50 birds by 1 May. No buildup was noted prior to leaving. A neighbor's feeders attracted most of the birds seen through the use of "hundreds of pounds of sunflower seed." Native food consisted of maple seed, dogwood buds and pine seed. A tally of 295 separate groups made over the whole period by Miss Wintyen totaled 2,915 individuals. In that study, females outnumbered males by 2.2 to 1.

The area around Washington, North Carolina was reported upon by Geraldine Cox who furnished a brief summary of her records extending from the first arrival on 30 December (8 males, 7 females) to the departure of a lone female on 11 May. In a count of 375 birds at odd times during their stay, the ratio of females to males was 1.3:1. Four males and 8 females were trapped and banded, and an Ohio banded bird was retrapped, details of which are given later in this summary. Flocks averaged 40 or 50 a day, and feeding was done mostly in the morning, as usual. Several times they were found in the swamp nearby, in the pines. Later in the spring they fed on the seed of Red and Black Maples. At least three of the birds that came to the station had been banded.

From Zebulon, North Carolina, Eloise F. Potter contributed some brief notes on that station. They follow—exclusive of banding results listed later.

6 January: 2 male Evening Grosbeaks, the first of the season here.

7 January: About 30 Evening Grosbeaks at feeder, the largest number seen at once all season.

1 April: 36 banded this day, following a light snow, although only a half dozen or so had been noted daily during a warm spell in March.

30 April: Last seen at this station.

4 May: 15 reported by neighbor one block away.

While the decline in enthusiasm for present day Evening Grosbeak appearances takes much from the volume of data we receive on their whereabouts, an increase in banding activity in our area is contributing slowly to our knowledge of their movements.

Several hundred Evening Grosbeaks were banded in the Carolinas this past winter. Sixteen recoveries of birds banded at foreign stations have been reported to us. Thirteen of these were retrapped at Zebulon, and Mrs. Potter has given us the following data on these captures. They are listed in the order in which the birds were banded, and they contain several points of interest. The retrap from Saybrook, Pennsylvania, may have special significance. Aside from being banded well to the west of the Appalachian range and retrapped in the southeast, both operations took place in the same flight season.

Flight	Date banded	Sex	Station	Date recovered
1959-’60	18 March	M	State College, Pa.	22 February
1960-’61	20 March	M	Adams, Mass.	8 March
1961-’62	21 November	M	Slaterville Springs, N. Y.	15 April
” ”	30 December	F	State College, Pa.	6 March
” ”	14 January	F	W. Hartford, Conn.	22 February
” ”	9 February	F	Arlington, Va.	24 April
” ”	2 May	F	State College, Pa.	22 March
” ”	15 May	M	White River Valley, Vt.	20 February
1962-’63	5 March	F	Ware, Mass.	19 March
” ”	21 March	M	Morris Area, Conn.	2 April
1963-’64	2 December	M	Saybrook, Pa.	4 March

NOTE: The flights of 1959-’60, 1961-’62, and 1963-’64 were major flights.

Other recoveries during the period, made at points other than Zebulon, were:

A female retrapped at Washington, North Carolina, 2 March, had been banded at Ashtabula, Ohio, 21 February 1960.

A male killed at Springfield, South Carolina, and recovered by Mrs. David Gleaton, 8 February, had been banded 16 April 1960 at Burlington, Vermont.

A female recovered at Whiteville, North Carolina, by Miriam M. Schulken, 11 March, had been banded at Sauk City, Wisconsin, 11 March 1962.

It is noteworthy that the three birds banded in the 1959-1960 flight were five years old when recovered.

APPENDIX

A list of those who contributed data for the 1963-1964 flight:

T. A. Beckett III
C. H. Blake
Mrs. E. E. Carr
Elizabeth Barnhill Clarkson
E. E. Clyde
Mrs. Fred Conderman
Geraldine Cox
C. T. Downer
Annie Rivers Faver
Gaston Gage
Mrs. David Gleaton
J. J. Hatch
Doris Hauser
Linville Hendren
Roger Hough
Mrs. Fred H. May
Mrs. E. A. McMaster
Robert Overing
James F. Parnell
Eloise F. Potter
Mrs. W. G. Ragsdale
Thomas L. Rial
Thomas Serratt
J. Gilbert Smith
Wendell P. Smith
Ronnie Underwood
Mary Urich
John O. Watkins
Mary Keller Wintyen

Wadmalaw Island, South Carolina
15 July 1964

NOTES ON THE WINTERING FINCHES OF 1963-1964

B. R. CHAMBERLAIN

Elsewhere in this issue there is an account of the Evening Grosbeak in the Carolinas last winter (1963-1964). Also in the Carolinas last winter there was an abnormally large population of several other members of the Fringillidae family. Whatever factors brought them here must still be guessed at, but having come, food was the common goal and feeding stations seemed to meet the requirements for most of them. There they congregated and, according to their nature, took or waited their opportunities for the fare set out for them.

Some of the following notes were culled from the Evening Grosbeak reports—other birds that were feeding with them. Some merited reports on their own. Appended to the Evening Grosbeak summary there is a list of contributors. Most of them also deserve credit for their part in these notes.

The winter of 1963-1964 was a "finch winter." Species that normally come down to the Carolinas in fair numbers seemed to be everywhere, and we received few reports of winter observations that did not contain comments upon the presence of Purple Finches and Pine Siskins. Goldfinches and juncos and some other sparrows apparently were too commonplace to receive mention except in the Christmas and Spring counts, where even House Sparrows are grasped for. But here and there over our varied territory some species, heretofore all but unknown, turned up to create a flurry of excitement.

Considered briefly, by species, this is the way the "finch winter" looked to us:

Purple Finches—The presence of Purple Finches in numbers seemed to be taken for granted. Reports over the territory were frequently confined to such generalizations as "abundant," "plentiful," and "more than ever before." These superlatives doubtless were justified. However, it is interesting to note that our Christmas Count of 1961 recorded 999 individuals whereas the 1963 census reported 863.

Banding results with Purple Finches came from but three stations.

At Greensboro, North Carolina, Brad Hawkins banded 225 between 15 December and 16 April. Of these, 139 were males, 42 were females, and the sex of 44 was not determined. During the previous winter a total of 33 were banded at that station.

At Zebulon, North Carolina, Eloise F. Potter banded "15 in male plumage and 7 in female plumage" between 22 February and 1 April.

At Anderson, South Carolina, Adair M. Tedards reported 68 banded between 15 March and 19 April. Her birds fed constantly upon suet and peanut butter during the week prior to their departure. Before that time they took seed exclusively, although the suet and peanut butter were available then. Mrs. Potter noted that she saw five male birds at her Zebulon station gorge themselves on suet on 25 March. She saw none at her station after 18 April.

Pine Grosbeaks—At Winnsboro, Fairfield County, South Carolina, Mrs. Edward McMaster and Mrs. Stuart Sherman discovered on 15 January, three Pine Grosbeaks in a high tree in the wooded McMaster yard, close by a window. On 23 January more Pine Grosbeaks and an Evening Grosbeak appeared in a nearby tulip poplar tree. On the following day, Kay Sisson of Columbia, who had been told of the find, went to Winnsboro and confirmed the identification. With Mr. and Mrs. McMaster she watched a male Pine Grosbeak for a half-hour or more in the McMaster's yard at distances as close as 8 feet. The bird was in the open in good light. It moved and returned to the same perch a number of times. Several Rose-breasted and Evening Grosbeaks and Purple Finches were also present. Mrs. Sisson is familiar with the Pine Grosbeak through her earlier residence in New England. On 26 January, Mrs. Sherman found a Pine Grosbeak at her feeder in another section of Winnsboro.

These observations in central South Carolina recall a sight record of a small flock of Pine Grosbeaks found in east-central North Carolina on 9 April 1962 (*Chat,* 26:77, 1962). This species has never been recorded as taken in either state.

Redpolls—As far as we know the Common Redpoll has never been taken in North Carolina. There are several notes on sight records, however, in *The Chat,* and others, mostly fragmentary, in the 1959 edition of *Birds of North Carolina.* This winter, another sight record was reported at Charlotte. One and at times, two pairs of redpolls came to a window feeder of Mrs. James S. Gray over a period of about one month. She identified the birds with the help of the *Audubon Bird Guide to Small Land Birds,* but she was not aware of the importance of their presence in Charlotte until too late to share her observations. She last saw them on 3 April. On 4 April, Mrs. W. H. Cobey and Mrs. J. R. Norwood, both competent observers, visited Mrs. Gray and were convinced of the correctness of her identification. The sight record is carried here because of their acceptance of it.

The Chat (28:22, 1964) records a flock of 30 redpolls at Chapel Hill, North Carolina, 29 December 1963.

Pine Siskins—This eratic little finch, a close kinsman of the American Goldfinch, is no stranger here but in the past years it has been encountered chiefly in the treetops in small "uneasy" bands, never overlong at one location. The appearances this time were often different. In addition to the treetop feeding and buzzing, they came in "brazenly" to numerous yard feeders and took their share or more of what was offered—small bird seed, cracked corn, and, after some experience, sunflower seed. Larger groups—flocks in the order of 200—were seen feeding on the ground (Southern Pines, Jay Carter), and, on one occasion, on the shoulders of a busy highway indifferent to passing cars (Greensboro, Brad Hawkins). Several comments were made upon the tameness of the birds, and some observers got within a very few feet of them. Since Pine Siskins nest on some of the higher mountains of North Carolina, it is not surprising that some would be found rather early in the western part of the state. However, this winter Richard H. Peake Jr. found them "very abundant" as early as 26 October in Jackson County. Thirteen of our 1963 Christmas Counts included Pine Siskins spread from the mountains to the coast. Quoting from a personal letter of 14 January from Arthur Stupka, Biologist at the Great Smoky Mountains National Park, "these birds are abundant, and the 2800 listed on our [Christmas] count was a very conservative figure." Siskins were not reported at yard feeders before the end of January, and peak populations were noted shortly after that. Although they were present to be counted in six of our Spring Counts—taken mostly at the very end of April—they were not found after the first week of May.

Reporting on the banding of Pine Siskins was confined to Zebulon, North Carolina, where Eloise F. Potter banded 86 of them between 22 February and 30 April. At least half of these were recaptured at the same station and one of them, first trapped on 8 March, had noticeably buffy feather edges when caught again on 21 and 28 April.

Red Crossbills—Red Crossbills are normally found in fair numbers in the higher North Carolina mountains. Occasionally they have wandered as far south as northern Florida (A. O. U. Check-list, 1957). It would seem reasonable to find good numbers of them in our Piedmont region during a "finch winter." Actually there was but one Piedmont occurrence reported and that was at Greensboro, North Carolina, when several showed up in the yard of George A. Smith on 22 February. They were still in the area on 2 May, the date of the Spring Count. Twelve or more were watched at Blowing Rock, North Carolina, on the late date of 25 May. They were seen by Margaret Harper and Mr. and Mrs. Henry Wilson and reported to us by Mrs. J. B. Bernard. The 1963 Chistmas Count at the Great Smoky Mountains National Park, 29 December, compiled by Arthur Stupka, included 89 of them. In his letter of 14 January he commented that "Red Crossbills are common this winter and occur at all altitudes; more are to be found in the higher-elevation forests, however."

White-winged Crossbills—The first White-winged Crossbills of the winter were a flock of 18 reported by Brad Hawkins at Greensboro, North Carolina, 28 December (*Chat*, 28:21 and 31, 1964). A small group, possibly from this flock, appeared in George Smith's yard on the morning of 11 January. On the following day "two males and two females, in beautiful plumage," returned there. They were watched by Mr. Smith and members of his family "at a distance of 10 to 12 feet, drinking water gathering in small puddles in the walk as the snow melted. Soon they were joined by four other." A second report of these crossbills in the Piedmont region came from Statesville, North Carolina. Fifteen miles north of that city Ronnie Underwood watched four males and nine females as they pulled seed from pine cones on 22 February. The three other observations of the winter were reported from the mountains: on the North Carolina side of Roan Mountain, in Mitchell County, veteran birder Fred Behrend found 88 of them on 21 December; at Newfound Gap, again on the North Carolina side, Mr. and Mrs. George R. Wood of Knoxville, Tennessee counted 15 White-winged Crossbills on 29 December; and in Jackson County, North Carolina, Richard H. Peake Jr. found a single bird on 31 December (*Chat*, 28:25, 1964).

In the preceding summary specific mention could be made of but a few of the reports received. All of the contributions were helpful, and they have been added to our permanent files.

Wadmalaw Island South Carolina
17 July 1964

SPRING COUNT—1964		COAST				COASTAL PLAIN					PIEDMONT							
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort County, N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne County, N. C.	Fayetteville, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Stanly County, N. C.	Charlotte, N. C.	Anderson County, S. C.	Iredell Co., N. C.
Common Loon	84	82	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..
Horned Grebe	7	1	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..
Pied-billed Grebe	5	..	..	1	2	..	..	..	..	..	..	2	..	..	..	..	..	..
Brown Pelican	30	..	..	2	28	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	2	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Double-cr. Cormorant	228	5	110	3	57	45	7	..	..	..	..	1	..	..	..	..	..	..
Anhinga	4	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	47	1	3	9	23	2	..	..	1	..	..	1	..	5	..	2	..	..
Green Heron	73	8	14	14	13	2	..	..	..	..	..	5	2	8	4	1	1	1
Little Blue Heron	99	7	3	13	75	..	..	..	..	..	..	..	..	..	1	..	..	..
Cattle Egret	443	263	37	29	100	4	..	9	1	..	..	..	..	..	..	..	..	..
Common Egret	156	57	23	29	42	..	4	..	..	..	..	..	..	..	1	..	..	..
Snowy Egret	194	83	12	54	45	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	79	18	8	29	24	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Night Heron	3	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Night Heron	13	3	..	..	6	..	1	..	..	..	..	..	..	..	..	2	1	..
Least Bittern	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
American Bittern	4	..	..	..	1	..	..	..	1	..	..	1	..	1	..	..	..	..
Glossy Ibis	30	15	1	6	..	8	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	90	..	..	38	52	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	9	..	..	..	..	..	8	..	..	..	..	1	..	..	..	..	..	..
Mallard	35	..	..	..	2	..	5	..	..	4	..	6	..	11	7	..	..	..
Black Duck	12	2	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..
Gadwall	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Bl.-winged Teal	31	3	..	9	..	..	..	..	..	..	..	..	..	17	..	..	2	..
Am. Widgeon	6	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..
Wood Duck	68	..	1	6	14	..	10	1	4	8	..	1	..	19	3	1	..	..
Redhead	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ring-necked Duck	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Scaup (sp.)*	16	1	1	2	9	..	..	..	..	..	..	1	2	..	..	..	..	..
Bufflehead	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	16	10	..	2	..	1	..	..	..	..	..	3	..	..	..	..	..	..
Hooded Merganser	8	..	..	..	..	..	6	..	..	..	..	2	..	..	..	..	..	..
Common Merganser	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Red-br. Merganser	32	12	2	10	6	1	..	..	..	..	..	..	..	1	..	..	..	..
Turkey Vulture	106	2	1	..	35	..	7	5	2	..	3	11	10	6	11	3	..	10
Black Vulture	214	..	..	19	180	1	..	..	..	..	1	9	1	3	..	..	..	..
Swallow-tailed Kite	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Sharp-sh. Hawk	5	..	..	..	..	..	2	..	..	..	..	1	..	1	1	..	..	..
Cooper's Hawk	6	..	..	..	1	..	..	..	..	1	..	2	..	..	1	..	..	1

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		COAST				COASTAL PLAIN					PIEDMONT							
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort County, N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne County, N. C.	Fayetteville, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Stanly County, N. C.	Charlotte, N. C.	Anderson County, S. C.	Iredell Co., N. C.
Red-tailed Hawk	35	..	..	2	9	..	3	..	2	..	1	7	3	3	1	..	1	3
Red-shouldered Hawk	14	1	3	1	2	..	..	..	..	..	1	1	2	1	..	1	1	..
Broad-winged Hawk	7	..	..	..	..	..	..	..	2	..	..	..	..	1	1	3	..	..
Marsh Hawk	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Osprey	50	1	5	2	15	2	6	2	..	..	1	7	2	6	..	1	..	..
Sparrow Hawk	10	1	..	..	1	..	..	..	1	2	..	3	..	1	..	..	1	..
Bobwhite	726	16	20	9	56	50	57	32	7	33	10	52	55	94	128	69	10	28
Turkey	11	..	..	2	7	..	..	..	..	..	..	..	..	..	2	..	..	..
Clapper Rail	41	6	20	9	6	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia Rail	3	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Sora	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Purple Gallinule	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Gallinule	7	..	..	3	3	..	1	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	129	..	3	63	4	..	20	..	..	..	..	34	..	1	2	..	1	1
Am. Oystercatcher	29	3	13	10	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Plover	204	2	6	37	156	..	..	..	..	..	..	..	3	..	..	..	..	..
Wilson's Plover	16	8	6	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..
Killdeer	59	..	..	3	1	..	2	..	1	2	1	16	3	4	18	4	2	2
Bl.-bellied Plover	144	27	43	57	17	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	32	..	..	..	32	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	7	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	..
Com. Snipe	31	13	..	..	..	..	..	..	1	..	..	9	..	5	..	..	..	3
Whimbrel	104	2	5	22	75	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	221	1	..	53	27	4	..	8	10	6	13	30	9	24	23	4	6	3
Solitary Sandpiper	45	..	..	..	4	..	..	..	1	3	1	15	8	1	2	6	4	..
Willet	308	72	102	17	117	..	..	..	..	..	..	..	..	..	..	..	..	..
Greater Yellowlegs	102	65	10	11	2	..	8	..	2	..	..	2	..	..	..	..	2	..
Lesser Yellowlegs	111	92	1	8	..	..	..	..	..	2	..	7	..	1	..	..	..	..
Knot	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pectoral Sandpiper	14	..	..	..	..	..	..	..	..	..	..	13	..	1	..	..	..	..
Least Sandpiper	112	83	..	..	..	1	1	..	..	..	..	27	..	..	..	..	..	..
Dunlin	404	2	185	77	140	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher	223	73	45	5	100	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Sandp.	31	21	2	..	4	..	..	..	..	..	..	..	2	..	..	..	2	..
Western Sandpiper	9	..	..	..	8	..	..	..	..	..	..	..	..	1	..	..	..	..
Sanderling	117	27	7	..	83	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-necked Stilt	14	..	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	521	250	123	3	104	5	30	..	..	..	..	1	..	5	..	..	..	..
Ring-billed Gull	519	150	172	23	65	20	45	..	..	..	5	8	..	25	5	..	1	..
Laughing Gull	874	650	58	4	75	44	43	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
[illegible]	28	11	16	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Least Tern	570	236	308	1	24	..	..	1	..	..	..	..	..	..	..	..	..	..
Royal Tern	285	70	19	4	186	..	6	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	21	..	7	..	10	..	..	..	..	..	..	..	..	..	4	..	..	..
Black Tern	5	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	419	280	30	15	94	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	1589	28	33	42	24	53	160	17	60	76	25	261	127	229	109	146	39	160
Ground Dove	30	..	..	..	30	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow-billed Cuckoo	33	..	..	2	4	..	1	..	..	..	..	5	1	4	4	12	..	..
Black-billed Cuckoo	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Barn Owl	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Screech Owl	4	..	..	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..
Gr. Horned Owl	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Barred Owl	15	..	1	..	2	..	1	..	..	..	..	..	2	6	..	1	1	1
Chuck-will's-widow	38	..	4	2	7	1	5	..	2	1	..	..	..	4	1	9	2	..
Whip-poor-will	38	..	..	..	..	..	..	..	..	..	..	3	2	9	6	6	..	12
Nighthawk	22	2	..	..	5	..	..	..	2	..	1	9	..	1	..	2	..	..
Chimney Swift	1945	31	2	2	4	149	240	63	12	82	10	476	190	475	81	58	38	32
Ruby-Th. Hummingbird	74	1	3	1	11	..	14	..	3	..	1	5	8	17	3	5	2	..
Belted Kingfisher	49	3	1	8	12	..	5	1	4	1	2	1	2	4	1	3	..	1
Yel.-sh. Flicker	321	5	16	6	1	20	33	4	8	15	6	40	14	79	36	20	11	7
Pileated Woodp.	40	1	2	14	7	1	7	..	..	..	..	..	..	1	2	3	..	2
Red-bellied Woodp.	247	1	8	11	27	11	20	2	8	10	1	14	23	56	15	24	3	13
Red-headed Woodp.	126	13	11	2	1	17	25	1	9	8	4	12	2	8	5	4	4	..
Yellow-bel. Sapsucker	13	..	1	..	..	..	..	..	..	3	..	3	2	1	2	..	..	1
Hairy Woodpecker	48	..	1	1	7	3	3	1	..	..	..	6	14	5	3	2	1	1
Downy Woodp.	164	2	3	4	10	6	17	..	2	6	4	12	29	29	10	14	3	13
Red-cock. Woodp.	5	..	..	..	..	2	..	..	..	3	..	..	..	..	..	..	..	..
Eastern Kingbird	654	1	17	19	49	13	23	29	9	196	28	91	62	35	34	25	21	2
Great Cr. Flycatcher	315	2	17	35	59	16	45	3	5	18	2	11	12	47	19	15	2	7
Eastern Phoebe	94	..	1	1	1	..	2	3	..	1	7	6	20	23	11	9	3	6
Acadian Flycatcher	81	..	2	5	..	2	4	..	5	..	3	18	2	10	16	11	3	..
Least Flycatcher	13	..	..	..	..	..	..	..	..	..	..	..	..	5	6	2	..	..
E. Wood Pewee	173	1	..	7	15	4	5	..	11	3	2	14	31	32	27	15	2	4
Olive-sided Flycatcher	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Horned Lark	12	..	..	..	..	..	..	..	..	..	..	..	..	5	2	..	..	5
Tree Swallow	10625	..	2	65	1833	45	353	750	..	250	58	1000	210	51	..	1	6000	7
Bank Swallow	1516	..	..	..	..	10	..	..	..	130	10	1200	..	161	5	..	..	..
Rough-wg. Swallow	1887	25	..	2	250	12	15	..	12	225	10	124	37	142	6	16	1000	11
Barn Swallow	8758	19	366	221	1111	546	217	834	4	265	..	345	356	387	63	..	4000	24
Cliff Swallow	366	..	..	..	3	2	1	..	..	180	16	2	..	160	2	..	..	..
Purple Martin	1238	38	66	9	140	47	105	31	16	25	2	65	105	69	452	7	42	19
Blue Jay	1269	17	83	20	82	71	76	16	16	97	11	198	55	230	101	83	62	51
Common Crow	673	24	47	47	79	10	53	20	4	25	11	27	37	95	47	28	18	101
Fish Crow	150	4	37	13	60	10	24	..	..	..	..	1	..	..	..	1	..	..
Car. Chickadee	488	15	8	12	34	18	44	2	3	6	6	47	43	97	62	44	12	35
Tufted Titmouse	556	5	10	12	15	17	64	18	7	99	8	36	47	84	64	30	6	34
White-br. Nuthatch	76	..	..	..	..	4	9	1	2	..	..	9	19	23	3	4	..	2
Red-br. Nuthatch	17	..	1	..	..	..	4	..	..	6	..	..	1	3	..	..	..	2
Brown-hd. Nuthatch	113	4	12	2	..	5	15	..	1	4	1	13	6	18	9	23	..	..
Brown Creeper	2	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..
House Wren	59	..	2	..	3	..	2	..	..	..	2	11	1	18	11	4	..	5
Winter Wren	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Carolina Wren	423	1	15	29	38	21	23	11	13	9	12	25	43	55	76	21	13	18
Long-bil. M. Wren	11	..	2	3	3	..	1	..	..	..	..	1	..	..	..	1	..	..

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	Individual Totals	COAST				COASTAL PLAIN					PIEDMONT							
		Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort County, N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne County, N. C.	Fayetteville, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Stanly County, N. C.	Charlotte, N. C.	Anderson County, S. C.	Iredell Co., N. C.
Red-tailed Hawk	35	..	..	2	9	..	3	..	2	..	1	7	3	3	1	..	1	3
Red-shouldered Hawk	14	1	3	1	2	..	..	..	..	..	1	1	2	1	..	1	1	..
Broad-winged Hawk	7	..	..	..	..	..	..	..	2	..	..	..	..	1	1	3	..	..
Marsh Hawk	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Osprey	50	1	5	2	15	2	6	2	..	..	1	7	2	6	..	1	..	..
Sparrow Hawk	10	1	..	..	1	..	..	..	1	2	..	3	..	1	..	..	1	..
Bobwhite	726	16	20	9	56	50	57	32	7	33	10	52	55	94	128	69	10	28
Turkey	11	..	..	2	7	..	..	..	..	..	..	..	..	..	2	..	..	..
Clapper Rail	41	6	20	9	6	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia Rail	3	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Sora	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Purple Gallinule	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Gallinule	7	..	..	3	3	..	1	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	129	..	3	63	4	..	20	..	..	..	..	34	..	1	2	..	1	1
Am. Oystercatcher	29	3	13	10	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Plover	204	2	6	37	156	..	..	..	..	..	..	..	3	..	..	..	..	..
Wilson's Plover	16	8	6	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..
Killdeer	59	..	..	3	1	..	2	..	1	2	1	16	3	4	18	4	2	2
Bl.-bellied Plover	144	27	43	57	17	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	32	..	..	..	32	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	7	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	..
Com. Snipe	31	13	..	..	..	..	..	..	1	..	..	9	..	5	..	..	..	3
Whimbrel	104	2	5	22	75	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	221	1	..	53	27	4	..	8	10	6	13	30	9	24	23	4	8	3
Solitary Sandpiper	45	..	..	..	4	..	..	..	1	3	1	15	8	1	2	8	4	..
Willet	308	72	102	17	117	..	..	..	..	..	..	..	..	..	..	..	..	..
Greater Yellowlegs	102	65	10	11	2	..	8	..	2	..	..	2	..	..	..	..	2	..
Lesser Yellowlegs	111	92	1	8	..	..	..	..	..	2	..	7	..	1	..	..	..	..
Knot	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purple Sandpiper	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pectoral Sandpiper	14	..	..	..	..	..	..	..	..	..	..	13	..	1	..	..	..	..
Least Sandpiper	112	83	..	..	..	1	1	..	..	..	..	27	..	..	..	..	..	..
Dunlin	404	2	185	77	140	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher	223	73	45	5	100	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Sandp.	31	21	2	..	4	..	..	..	..	..	..	..	2	..	..	..	2	..
Western Sandpiper	9	..	..	..	8	..	..	..	..	..	..	..	..	1	..	..	..	..
Sanderling	117	27	7	..	83	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-necked Stilt	14	..	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	521	250	123	3	104	5	30	..	..	..	..	1	..	5	..	..	..	..
Ring-billed Gull	519	150	172	23	65	20	45	..	..	..	5	8	..	25	5	..	1	..
Laughing Gull	874	650	58	4	75	44	43	..	..	..	..	..	..	..	..	..	..	..
Bonaparte's Gull	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Gull-billed Tern	28	11	16	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Forster's Tern	59	..	2	6	43	7	..	..	..	..	..	..	..	..	..	..	1	..
Common Tern	64	62	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Least Tern	570	236	308	1	24	..	..	1	..	..	..	..	..	..	..	..	..	..
Royal Tern	285	70	19	4	186	..	6	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	21	..	7	..	10	..	..	..	..	..	..	..	..	..	4	..	..	..
Black Tern	5	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	419	280	30	15	94	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	1589	28	33	42	24	53	160	17	60	76	25	261	127	229	109	146	39	160
Ground Dove	30	..	..	..	30	..	..	..	..	..	..	..	..	..	..	..	..	..
Yellow-billed Cuckoo	33	..	..	2	4	..	1	..	..	..	..	5	1	4	4	12	..	..
Black-billed Cuckoo	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Barn Owl	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Screech Owl	4	..	..	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..
Gr. Horned Owl	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Barred Owl	15	..	1	..	2	..	1	..	..	..	..	..	2	6	..	1	1	1
Chuck-will's-widow	38	..	4	2	7	1	5	..	2	1	..	..	..	4	1	9	2	..
Whip-poor-will	38	..	..	..	..	..	..	..	..	..	..	3	2	9	6	6	..	12
Nighthawk	22	2	..	..	5	..	..	..	2	..	1	9	..	1	..	2	..	..
Chimney Swift	1945	31	2	2	4	149	240	63	12	82	10	470	190	475	81	58	38	32
Ruby-Th. Hummingbird	74	1	3	1	11	..	14	..	3	..	1	5	8	17	3	5	2	..
Belted Kingfisher	49	3	1	8	12	..	5	1	4	1	2	1	2	4	1	3	..	1
Yel.-sh. Flicker	321	5	16	6	1	20	33	4	8	15	6	40	14	79	36	20	11	7
Pileated Woodp.	40	1	2	14	7	1	7	..	..	..	..	..	..	1	2	3	..	2
Red-bellied Woodp.	247	1	8	11	27	11	20	2	8	10	1	14	23	56	15	24	3	13
Red-headed Woodp.	126	13	11	2	1	17	25	1	9	8	4	12	2	8	5	4	4	..
Yellow-bel. Sapsucker	13	..	1	..	..	..	..	..	..	3	..	3	2	1	2	..	..	1
Hairy Woodpecker	48	..	1	1	7	3	3	1	..	..	..	6	14	5	3	2	1	1
Downy Woodp.	164	2	3	4	10	6	17	..	2	6	4	12	29	29	10	14	3	13
Red-cock. Woodp.	5	..	..	..	..	2	..	..	..	3	..	..	..	..	..	..	..	..
Eastern Kingbird	654	1	17	19	49	13	23	29	9	196	28	91	62	35	34	25	21	2
Great Cr. Flycatcher	315	2	17	35	59	16	45	3	5	18	2	11	12	47	19	15	2	7
Eastern Phoebe	94	..	1	1	1	..	2	3	..	1	7	6	20	23	11	9	3	6
Acadian Flycatcher	81	..	2	5	..	2	4	..	5	..	3	18	2	10	16	11	3	..
Least Flycatcher	13	..	..	..	..	..	..	..	..	..	..	..	..	5	6	2	..	..
E. Wood Pewee	173	1	..	7	15	4	5	..	11	3	2	14	31	32	27	15	2	4
Olive-sided Flycatcher	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Horned Lark	12	..	..	..	..	..	..	..	..	..	..	..	..	5	2	..	..	5
Tree Swallow	10625	..	2	65	1833	45	353	750	..	250	58	1000	210	51	..	1	6000	7
Bank Swallow	1516	..	..	..	..	10	..	..	..	130	10	1200	..	161	5	..	..	..
Rough-wg. Swallow	1887	25	..	2	250	12	15	..	12	225	10	124	37	142	6	16	1000	11
Barn Swallow	8758	19	388	221	1111	546	217	834	4	265	..	345	356	387	63	..	4000	24
Cliff Swallow	366	..	..	..	3	2	1	..	..	180	16	2	..	160	2	..	..	..
Purple Martin	1238	38	86	9	140	47	105	31	16	25	2	65	105	69	452	7	42	19
Blue Jay	1269	17	83	20	82	71	76	16	16	97	11	198	55	230	101	83	62	51
Common Crow	673	24	47	47	79	10	53	20	4	25	11	27	37	95	47	28	18	101
Fish Crow	150	4	37	13	60	10	24	..	..	..	..	1	..	..	..	1	..	..
Car. Chickadee	488	15	8	12	34	18	44	2	3	6	6	47	43	97	62	44	12	35
Tufted Titmouse	556	5	10	12	15	17	64	18	7	99	8	36	47	84	64	30	6	34
White-br. Nuthatch	76	..	..	..	..	4	9	1	2	..	..	9	19	23	3	4	..	2
Red-br. Nuthatch	17	..	1	..	..	..	4	..	..	6	..	..	1	3	..	..	..	2
Brown-hd. Nuthatch	113	4	12	2	..	5	15	..	1	4	1	13	6	18	9	23	..	..
Brown Creeper	2	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..
House Wren	59	..	2	..	3	..	2	..	..	..	2	11	1	18	11	4	..	5
Winter Wren	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Carolina Wren	423	1	15	29	38	21	23	11	13	9	12	25	43	55	78	21	13	18
Long-bil. M. Wren	11	..	2	3	3	..	1	..	..	..	..	1	..	..	..	1	..	..

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	Individual Totals	COAST				COASTAL PLAIN					PIEDMONT							
		Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort County, N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne County, N. C.	Fayetteville, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Stanly County, N. C.	Charlotte, N. C.	Anderson County, S. C.	Iredell Co., N. C.
Short-bil. M. Wren	4	..	..	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Mockingbird	1318	85	116	22	100	62	81	30	14	125	23	74	77	155	134	124	42	54
Catbird	485	12	8	6	13	17	33	7	6	49	14	92	50	81	38	14	22	23
Brown Thrasher	610	19	20	11	23	27	71	9	19	45	9	34	29	82	107	28	49	28
Robin	1567	1	62	..	..	22	56	25	3	55	44	183	82	363	170	243	200	58
Wood Thrush	521	1	14	2	2	14	29	6	5	24	8	50	55	209	10	62	16	14
Hermit Thrush	9	..	..	..	3	..	..	..	..	..	..	2	..	..	2	..	..	2
Swainson's Thrush	50	..	1	..	..	..	..	..	..	..	..	4	2	25	..	16	..	2
Gray ch. Thrush	4	..	1	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..
Veery	24	..	..	..	1	..	..	1	..	1	..	8	1	9	..	2	1	..
Eastern Bluebird	307	1	1	1	28	6	20	11	20	6	6	27	42	22	69	28	7	12
Bl.-gray Gnatcatcher	242	6	8	7	34	..	8	1	7	1	8	35	19	42	35	17	2	12
Golden-cr. Kinglet	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Ruby-cr. Kinglet	20	..	..	..	1	..	2	..	..	..	..	6	4	7	..	..	..	..
Water Pipit	2	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Cedar Waxwing	1298	51	128	4	5	..	15	..	..	45	..	30	59	293	10	61	25	572
Log. Shrike	208	..	2	6	24	4	13	4	14	4	3	19	8	24	23	21	5	34
Starling	7663	125	155	23	23	188	195	420	45	366	400	3580	113	992	280	331	200	227
White-eyed Vireo	333	28	8	60	21	10	81	3	4	1	3	12	13	26	36	15	2	10
Yel.-th. Vireo	120	3	3	6	..	4	15	..	4	4	10	6	5	25	23	3	..	9
Solitary Vireo	5	..	..	..	..	..	..	..	..	..	..	3	..	1	1	..	..	..
Red-eyed Vireo	569	1	3	37	25	13	46	1	8	7	16	81	32	93	65	60	3	78
Bl.-and-white Warbler	101	..	1	4	1	1	3	3	3	1	1	30	11	32	4	4	..	2
Prothonotary Warbler	92	2	4	4	3	1	36	2	4	3	..	11	2	1	6	10	3	..
Worm-eating Warbler	12	..	..	..	..	..	..	1	..	1	..	3	..	4	..	..	..	3
Golden-wg. Warbler	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..
Blue-wg. Warbler	4	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..
Tennessee Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Parula Warbler	383	..	43	43	64	16	71	3	10	7	13	44	4	27	2	6	..	30
Yellow Warbler	67	..	1	..	..	..	1	1	1	2	1	8	3	37	7	1	2	2
Magnolia Warbler	27	..	..	..	..	..	..	..	..	..	1	14	2	9	1	..	..	..
Cape May Warbler	52	..	..	..	..	..	..	..	..	..	..	1	4	12	..	1	7	27
Bl.-th. Blue Warbler	79	..	..	..	3	..	2	5	..	..	4	31	7	21	..	4	..	2
Myrtle Warbler	821	6	41	9	11	10	151	75	48	15	33	78	111	131	6	13	17	66
Bl.-th. Green Warbler	19	..	1	..	..	..	..	..	..	..	..	..	1	12	5	..	..	..
Cerulean Warbler	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2
Blackburnian Warbler	10	..	..	..	..	..	..	..	..	..	1	1	..	7	1	..	..	..
Yellow-throated Warbler	156	1	8	20	19	7	35	1	6	1	1	10	23	14	8	2	..	..
Chestnut-sided Warbler	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	..	3	2	12	..	1	..	4

Pine Warbler	103	4	3	12	7	3	7	..	5	1	3	14	5	11	11	17	..	..
Prairie Warbler	238	56	18	..	6	4	13	..	9	1	5	20	35	25	24	14	5	3
Palm Warbler	11	..	..	..	4	..	..	..	..	..	..	2	..	2	..	..	1	2
Ovenbird	169	..	..	2	..	7	3	..	3	..	10	69	20	45	1	4	..	5
N. Waterthrush	17	..	..	..	..	..	..	..	..	1	..	14	..	2	..	..	..	..
La. Waterthrush	32	..	..	..	..	1	2	..	1	..	1	9	1	6	1	4	5	1
Kentucky Warbler	31	..	1	..	..	..	..	..	..	..	..	12	2	5	1	10	..	..
Yellowthroat	443	1	5	31	16	17	37	6	8	2	8	103	18	65	76	23	6	21
Yel.-br. Chat	165	..	6	2	2	..	3	1	2	2	7	13	15	28	25	31	4	24
Hooded Warbler	196	..	6	32	3	7	22	1	5	1	5	23	19	30	6	12	5	19
Wilson's Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Canada Warbler	9	..	..	..	..	..	..	..	..	..	..	4	..	4	..	1	..	..
Am. Redstart	263	..	1	..	3	..	1	..	2	3	11	69	36	83	15	18	2	19
House Sparrow	4372	60	305	13	3	433	208	261	74	650	71	570	73	555	486	222	300	88
Bobolink	3977	..	52	90	..	20	25	50	..	..	25	1300	500	1312	42	..	446	115
E. Meadowlark	1529	36	25	33	23	16	64	30	16	113	27	200	155	230	181	101	104	170
Red-wg. Blackbird	3716	89	230	94	630	81	139	30	34	214	29	1145	103	297	173	37	287	104
Orchard Oriole	210	3	26	15	27	24	14	..	14	19	1	7	1	12	26	5	6	10
Baltimore Oriole	50	..	2	..	1	..	9	..	..	..	..	4	2	12	1	..	1	18
Rusty Blackbird	20	..	..	..	..	..	2	..	..	3	..	..	3	1	4	..	1	6
Boat-tailed Grackle	346	74	121	44	107	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	2290	158	58	50	45	348	292	74	51	237	82	38	6	287	140	129	172	123
Br.-hd. Cowbird	287	7	6	5	2	13	50	..	3	5	11	31	21	37	25	14	8	49
Scarlet Tanager	149	..	..	1	..	..	..	2	..	2	4	23	19	79	2	4	..	13
Summer Tanager	298	3	8	25	57	12	13	4	10	11	9	18	34	29	43	18	3	1
Cardinal	2153	55	134	60	175	121	104	26	46	144	22	120	182	341	280	122	44	177
Rose-br. Grosbeak	51	..	..	..	..	..	..	..	2	..	..	5	2	15	..	2	..	25
Blue Grosbeak	228	1	4	5	4	8	7	6	3	16	1	42	17	18	37	9	29	21
Indigo Bunting	508	1	21	19	10	13	15	2	2	15	6	30	42	95	61	103	25	48
Painted Bunting	135	2	..	41	92	..	..	..	..	..	..	..	..	..	..	..	..	..
Evening Grosbeak	128	2	..	..	..	11	100	..	2	1	..	8	4	..	..	..	..	..
Purple Finch	28	..	1	..	..	..	..	..	..	..	..	..	3	3	..	..	..	21
Pine Siskin	368	..	..	..	..	..	..	..	..	..	..	50	41	220	1	..	45	11
Am. Goldfinch	2102	..	227	..	15	310	..	..	14	3	38	110	256	654	141	14	65	255
Red Crossbill	10	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..
Ruf.-sided Towhee	935	19	87	26	90	32	86	8	10	39	14	77	71	159	57	80	46	34
Ipswich Sparrow	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	449	23	63	5	30	..	50	..	8	..	10	180	19	17	23	..	21	..
Grasshopper Sparrow	93	..	..	..	..	..	..	..	..	..	3	19	..	42	..	28	1	..
Seaside Sparrow	49	46	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	4	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..
Bachman's Sparrow	10	..	5	..	..	..	..	..	..	3	..	2	..	..	..	..	..	..
Slate-colored Junco	10	..	3	..	..	..	..	..	..	1	..	..	..	6	..	..	..	..
Chipping Sparrow	603	2	9	1	12	8	30	1	6	27	40	98	83	120	94	20	6	46
Field Sparrow	497	6	23	2	2	..	14	1	..	16	4	147	36	85	75	47	13	26
White-cr. Sparrow	25	..	..	..	..	..	..	..	..	1	..	1	2	19	..	..	2	..
White-thtd. Sparrow	1448	2	91	44	49	27	80	40	30	40	46	385	128	244	8	10	22	202
Fox Sparrow	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Swamp Sparrow	99	..	6	1	13	..	11	..	..	..	2	56	3	4	1	1	..	1
Song Sparrow	120	12	10	5	8	..	..	..	..	1	..	14	6	47	2	9	2	4
Total Number Species	231	112	127	125	142	84	108	63	82	87	85	148	111	146	111	102	88	95
Total Number Individuals	89338	4054	4395	2270	7980	3234	4257	3017	836	4141	1376	13925	4334	10966	4627	2936	13619	3571

* See text for Scaup species.

SPRING COUNT—1964

		COAST				COASTAL PLAIN					PIEDMONT							
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort County, N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne County, N. C.	Fayetteville, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Stanly County, N. C.	Charlotte, N. C.	Anderson County, S. C. *	Iredell Co., N. C.
Short-bil. M. Wren	4	..	..	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Mockingbird	1318	85	116	22	100	62	81	30	14	125	23	74	77	155	134	124	42	54
Catbird	485	12	8	6	13	17	33	7	6	49	14	92	50	81	38	14	22	23
Brown Thrasher	610	19	20	11	23	27	71	9	19	45	9	34	29	82	107	28	49	28
Robin	1567	1	62	..	..	22	56	25	3	55	44	183	82	363	170	243	200	58
Wood Thrush	521	1	14	2	2	14	29	6	5	24	8	50	55	209	10	62	16	14
Hermit Thrush	9	..	..	..	3	..	..	..	..	..	..	2	..	..	2	..	..	2
Swainson's Thrush	50	..	1	..	..	..	..	..	..	..	..	4	2	25	..	16	..	2
Gray ch. Thrush	4	..	1	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..
Veery	24	..	..	..	1	..	..	1	..	1	..	8	1	9	..	2	1	..
Eastern Bluebird	307	1	1	1	28	6	20	11	20	6	6	27	42	22	69	28	7	12
Bl.-gray Gnatcatcher	242	6	8	7	34	..	8	1	7	1	8	35	19	42	35	17	2	12
Golden-cr. Kinglet	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Ruby-cr. Kinglet	20	..	..	..	1	..	2	..	..	..	..	6	4	7	..	..	..	..
Water Pipit	2	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Cedar Waxwing	1298	51	128	4	5	..	15	..	..	45	..	30	59	293	10	61	25	572
Log. Shrike	208	..	2	8	24	4	13	4	14	4	3	19	8	24	23	21	5	34
Starling	7663	125	155	23	23	188	195	420	45	366	400	3580	113	992	280	331	200	227
White-eyed Vireo	333	28	8	60	21	10	81	3	4	1	3	12	13	26	36	15	2	10
Yel.-th. Vireo	120	3	3	6	..	4	15	..	4	4	10	6	5	25	23	3	..	9
Solitary Vireo	5	..	..	..	..	..	..	..	..	..	..	3	..	1	1	..	..	..
Red-eyed Vireo	569	1	3	37	25	13	46	1	8	7	16	81	32	93	65	60	3	78
Bl.-and-white Warbler	101	..	1	4	1	1	3	3	3	1	1	30	11	32	4	4	..	2
Prothonotary Warbler	92	2	4	4	3	1	36	2	4	3	..	11	2	1	6	10	3	..
Worm-eating Warbler	12	..	..	..	..	..	..	1	..	1	..	3	..	4	..	..	..	3
Golden-wg. Warbler	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..
Blue-wg. Warbler	4	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..
Tennessee Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Parula Warbler	383	..	43	43	64	16	71	3	10	7	13	44	4	27	2	6	..	30
Yellow Warbler	87	..	1	..	..	..	1	1	1	2	1	8	3	37	7	1	2	2
Magnolia Warbler	27	..	..	..	..	..	..	..	..	..	1	14	2	9	1	..	..	..
Cape May Warbler	52	..	..	..	..	..	..	..	..	..	..	1	4	12	..	1	7	27
Bl.-th. Blue Warbler	79	..	..	..	3	..	2	5	..	..	4	31	7	21	..	4	..	2
Myrtle Warbler	821	8	41	9	11	10	151	75	48	15	33	78	111	131	6	13	17	66
Bl.-th. Green Warbler	19	..	1	..	..	..	..	..	..	..	..	..	1	12	5	..	..	..
Cerulean Warbler	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2
Blackburnian Warbler	10	..	..	..	..	..	..	..	..	..	1	1	..	7	1	..	..	..
Yellow-throated Warbler	156	1	8	20	19	7	35	1	6	1	1	10	23	14	8	2	..	..
Chestnut-sided Warbler	23	..	..	1	..	..	..	..	..	..	..	3	2	12	..	1	..	4
Bay-br. Warbler	5	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..	..	..
Blackpoll Warbler	*55*	..	..	1	..	..	..	..	..	1	2	15	..	1	1	13	14	7
Pine Warbler	*103*	4	3	12	7	3	7	..	5	1	3	14	5	11	11	17	..	..
Prairie Warbler	*238*	56	18	..	6	4	13	..	9	1	5	20	35	25	24	14	5	3
Palm Warbler	*11*	..	..	..	4	..	..	..	..	..	..	2	..	2	..	..	1	2
Ovenbird	*169*	..	..	2	..	7	3	..	3	..	10	69	20	45	1	4	..	5
N. Waterthrush	17	..	..	..	..	..	..	..	..	1	..	14	..	2	..	..	..	..
La. Waterthrush	32	..	..	..	..	1	2	..	1	..	1	9	1	6	1	4	5	1
Kentucky Warbler	31	..	1	..	..	..	..	..	..	..	..	12	2	5	1	10	..	..
Yellowthroat	443	1	5	31	16	17	37	6	8	2	8	103	18	65	76	23	6	21
Yel.-br. Chat	165	..	6	2	2	..	3	1	2	2	7	13	15	28	25	31	4	24
Hooded Warbler	196	..	6	32	3	7	22	1	5	1	5	23	19	30	6	12	5	19
Wilson's Warbler	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Canada Warbler	9	..	..	..	..	..	..	..	..	..	..	4	..	4	..	1	..	..
Am. Redstart	263	..	1	..	3	..	1	..	2	3	11	69	36	83	15	18	2	19
House Sparrow	4372	60	305	13	3	433	208	261	74	650	71	570	73	555	486	222	300	88
Bobolink	3977	..	52	90	..	20	25	50	..	..	25	1300	500	1312	42	..	446	115
E. Meadowlark	1529	30	25	33	23	16	64	30	16	113	27	200	155	230	181	101	104	170
Red-wg. Blackbird	3718	89	230	94	630	81	139	30	34	214	29	1145	103	297	173	37	287	104
Orchard Oriole	210	3	26	15	27	24	14	..	14	19	1	7	1	12	26	5	6	10
Baltimore Oriole	50	..	2	..	1	..	9	..	..	..	..	4	2	12	1	..	1	18
Rusty Blackbird	20	..	..	..	..	..	2	..	..	3	..	..	3	1	4	..	1	6
Boat-tailed Grackle	346	74	121	44	107	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	2290	158	58	50	45	348	292	74	51	237	82	38	6	287	140	129	172	123
Br.-hd. Cowbird	287	7	6	5	2	13	50	..	3	5	11	31	21	37	25	14	8	49
Scarlet Tanager	149	..	..	1	..	..	..	2	..	2	4	23	19	79	2	4	..	13
Summer Tanager	298	3	8	25	57	12	13	4	10	11	9	18	34	29	43	18	3	1
Cardinal	2153	55	134	60	175	121	104	26	46	144	22	120	182	341	280	122	44	177
Rose-br. Grosbeak	51	..	..	..	..	..	..	..	2	..	..	5	2	15	..	2	..	25
Blue Grosbeak	228	1	4	5	4	8	7	6	3	18	1	42	17	18	37	9	29	21
Indigo Bunting	508	1	21	19	10	13	15	2	2	15	8	30	42	95	61	103	25	48
Painted Bunting	135	2	..	41	92	..	..	..	..	..	..	..	..	..	..	..	..	..
Evening Grosbeak	128	2	..	..	..	11	100	..	2	1	..	8	4	..	..	..	..	..
Purple Finch	28	..	1	..	..	..	..	..	..	..	..	..	3	3	..	..	..	21
Pine Siskin	368	..	..	..	..	..	..	..	..	..	..	50	41	220	1	..	45	11
Am. Goldfinch	2102	..	227	..	15	310	..	..	14	3	38	110	256	654	141	14	65	255
Red Crossbill	10	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..
Ruf.-sided Towhee	935	19	87	26	90	32	86	8	10	39	14	77	71	159	57	80	46	34
Ipswich Sparrow	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	449	23	63	5	30	..	50	..	8	..	10	180	19	17	23	..	21	..
Grasshopper Sparrow	93	..	..	..	..	.	..	..	..	..	3	19	..	42	..	28	1	..
Seaside Sparrow	49	48	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	4	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	..
Bachman's Sparrow	10	..	5	..	..	..	..	..	..	3	..	2	..	..	..	..	..	..
Slate-colored Junco	10	..	3	..	..	..	..	..	..	1	..	..	..	6	..	..	..	..
Chipping Sparrow	803	2	9	1	12	8	30	1	6	27	40	98	83	120	94	20	8	46
Field Sparrow	497	6	23	2	2	..	14	1	..	18	4	147	36	85	75	47	13	28
White-cr. Sparrow	25	..	..	..	..	..	..	..	..	1	..	1	2	19	..	..	2	..
White-thtd. Sparrow	1448	2	91	44	49	27	80	40	30	40	48	385	128	244	8	10	22	202
Fox Sparrow	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Swamp Sparrow	99	..	6	1	13	..	11	..	..	..	2	56	3	4	1	1	..	1
Song Sparrow	120	12	10	5	8	..	..	..	..	1	..	14	6	47	2	9	2	4
Total Number Species	231	112	127	125	142	84	108	63	82	87	85	148	111	146	111	102	88	95
Total Number Individuals	89338	4054	4395	2270	7980	3234	4257	3017	836	4141	1376	13925	4334	10966	4627	2936	13619	3571

* See text for Scaup species.

SPRING COUNT—1964

Eloise F. Potter

Tremendous concentrations of migrating swallows, some rarely seen warblers, and lingering winter finches combined to make exciting birding for many CBC members participating in the 1964 Spring Count.

Seventeen counts were made between extreme dates of 25 April (three localities) and 9 May (two localities) with the majority made the weekend of 2-3 May (nine localities), all within the suggested dates of 24 April to 10 May. A total of 243 observers in 80 parties spent 767 party-hours traveling 3,047 party-miles. Approximately 90,000 individuals of 231 species were recorded with the largest totals coming from Raleigh, 13,925; Anderson, 13,619; and Greensboro, 10,966. Localities reporting the most species were Raleigh, 148; Greensboro, 146; and Hilton Head Island, 142.

Swallows

The Henderson compiler commented on the "largest number of swallows ever seen in this vicinity, estimated to be in the thousands"; but relatively few were identified by species and recorded in the count table. Other places reporting swallows "in the thousands" were Hilton Head Island, Raleigh, and Anderson. The Rocky Mount compiler also mentioned the large number of swallows and termed "very conservative" the figures given: 750 Tree Swallows and 834 Barn Swallows. He described the swallows as being "in the midst of a migration of the magnitude that none of us had ever seen before."

Compilers were indeed right about the unusual concentrations of swallows. The largest flight of swallows reported on a Spring Count during the 5-year period 1959-1963 was seen at Greensboro 6 May 1961: 561 Tree Swallows, 504 Bank Swallows, 80 Rough-winged Swallows, 730 Barn Swallows, and 45 Cliff Swallows (*Chat*, 25:58). A comparison of totals for each species with those of last year (*Chat*, 27:42-51) gives a rough idea of relative abundance.

	1963	**1964**
Number of Count Areas	16	17
Number of Observers/Parties	180/51	243/80
Tree Swallow	603	10,625
Bank Swallow	4	1,516
Rough-winged Swallow	187	1,887
Barn Swallow	394	8,758
Cliff Swallow	1	366

It is interesting to compare the dates that unusual swallow concentrations were recorded. Over 3,000 swallows were seen at Hilton Head Island 25 April. That same weekend Morehead, Wilmington, New Bern, and Iredell County noted relatively few swallows (under 600 at each locality). The weekend of 2-3 May, while Henderson, Raleigh, and Anderson recorded extraordinary numbers of swallows, Greensboro, Chapel Hill, Fayetteville, and Beaufort County (N. C.) also had large numbers of swallows (over 600 at each locality). However, on 2 May Charleston recorded a total of only 288 individuals of the five species under consideration, 62% of the number seen in 1963. Total individuals of all species ran only 63% of the 1963 total. No doubt weather conditions were largely responsible for the low count at Charleston since participation by observers was comparable to that of the previous year. Concerning the small number of swallows seen at Charleston, B. R. Chamberlain commented, in a personal letter, "Certainly Charleston missed the heavy inland passage of swallows on the 2-3 May weekend, but the low figure was not representative." The tremendous swallow flights were no longer in evidence on 9 May when Charlotte noted only 17 swallows and Stanly County 76.

Records at Raleigh-Durham Weather Station show that a northeaster was blowing off the coast of North Carolina the weekend of 2-3 May. The large and cool high pressure system covered the entire Atlantic seaboard from Maine through the Carolinas. It caused rainy and cloudy conditions extending inland to the mountains. Temperatures ranged considerably below normal for the time of the year.

The low count at Charleston and the high counts made at Raleigh, Greensboro, and Anderson the same weekend seem to indicate that the main thrust of the migration was driven inland by the coastal storm. It also seems likely that weather conditions retarded the northward movement of swallows (and possibly other migrants) through the Carolinas while other birds continued to move into the area from the south where conditions were more favorable for migration, thus creating extraordinary concentrations around particularly desirable habitats such as large reservoirs and extensive grain fields.

WARBLERS

On the entire count 32 species of warblers were noted. Greensboro alone tallied 30 different warblers including three Golden-winged, one Tennessee, and one Wilson's.

WINTER FINCHES

Lingering winter finches reflected the unusual southward movement which marked the 1963-1964 winter season. On the count were 128 Evening Grosbeaks, 100 of these at New Bern 26 April; 28 Purple Finches, 21 in Iredell County 26 April; 368 Pine Siskins, 220 at Greensboro 2 May; 10 Red Crossbills, all at Greensboro; and 25 White-crowned Sparrows, 19 at Greensboro.

CATTLE EGRETS

The upward trend of the Cattle Egret population noted by Johnston in 1962 (*Chat*, **26**:58) and Potter in 1963 (*Chat*, 27:42) continued. Only six Cattle Egrets were reported in 1960, 57 in 1961, 62 in 1962, 123 in 1963, and 443 in 1964.

LENOIR COUNT

In addition to the 17 reports shown in the table, a list of 99 species was made at Lenoir, North Carolina, on 2 May. Unfortunately it could not be included in the summary because a tally of individuals was not shown. Among the interesting birds seen were the Common Merganser, Cape May Warbler, Cerulean Warbler, Baltimore Oriole, Evening Grosbeak, Purple Finch, Pine Siskin, and White-crowned Sparrow. Participating were Mrs. J. B. Bernard, Margaret Harper (compiler), Cary Harrison, J. T. Ingram, Mr. and Mrs. E. M. Manchester, Helen Myers, Mrs. J. H. Segars, and Wendell Smith.

Anderson County, S. C. (all points within a 15-mile diameter circle centered at Anderson Airport, including Hartwell Lake backwaters and the city of Anderson and towns of Starr and Sandy Springs; open field 25%, deciduous woods 20%, pine woods 20%, mixed woods 15%, ponds and creeks 5%, town 5%, Hartwell area 10%).—2 May; 4:30 AM to 6:00 PM. Cloudy with heavy rain all day; temp. 52-46°; wind NEbE 15-30 mph. Ten observers in 4 parties. Total party-hours, 36 (28 by car, 8 on foot); total party-miles, 160 (153 by car, 7 on foot). **Total species, 88; total individuals, 13,619.** (Seen in area during count period but not on count day: Pied-billed Grebe, Great Blue Heron, Turkey Vulture, Black Vulture, Osprey, Yellow-billed Cuckoo, Belted Kingfisher, Horned Lark, White-breasted Nuthatch, Brown-headed Nuthatch, Swainson's Thrush, Ruby-crowned Kinglet, Parula Warbler, Magnolia Warbler, Pine Warbler.) The unusually large numbers of swallows were fairly well distributed over Hartwell Lake and grain fields S and SW of Anderson. The **Forster's Tern** (RCT) was watched for 30 minutes fishing in Hartwell backwaters.—Mr. and Mrs. R. C. Brownlee, Arthur Klugh, Mr. and Mrs. C. B. Nichols, Mr. and Mrs. Howard Spencer, Adair M. Tedards (compiler), R. C. Tedards, Caroline Watson.

Beaufort County, N. C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County, including both sides of river from Bath to Washington; river and river shore 25%, fields 25%, mixed woods 35%, pine woods 5%, feeders 10%).—3 May; 4:30 AM to 7 PM. Windy, raining most of day; temp. 48-63°; wind NE 8-18 mph. Nine observers in 2 parties, 4 individuals working own yards. Total party-hours, 27 (14 by car, 13 on foot); total party-miles, 131 (125 by car, 6 on foot). **Total species, 84; total individuals, 3,234.** (Seen in area during count period but not on count day: Common Loon, Common Egret, Ring-necked Duck, Greater Scaup, Sparrow Hawk, Yellow-billed Cuckoo, Belted Kingfisher, Gray-cheeked Thrush, Cedar Waxwing, Yellow Warbler, Black-throated Green Warbler, Northern Waterthrush.) **Glossy Ibis,** a first record for the county, was watched closely while feeding in muddy pond in field with cattle. **Barn Swallows** were everywhere, flying very close to the ground and even sitting on it.—Ethel Barkley, Mabel Bowen, Ruth Brown, Geraldine Cox (compiler), James McLaurin, Mary McLaurin, Maxine Perrine, Florence Rollins, Louise Satterthwaite.

Chapel Hill, N. C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin Streets; mixed deciduous woodlands 25%, open fields and farmlands 30%, pond and lake shores, creek banks 25%, pine woods 5%, wooded residential 15%).—3 May; 5 AM to 6 PM. Cloudy, drizzle; temp. 47-60°; wind NE 5-25 mph, gusty. Twenty-nine observers in 8 parties, 3 individuals working own yards. Total party-hours, 50 (15 by car, 35 on foot); total party-miles, 76 (46 by car, 30 on foot). **Total species, 111; total individuals, 4,334.** (Seen in area during count period but not on count day: **Redhead**, Broad-winged Hawk, Great Horned Owl, Pileated Woodpecker, Horned Lark, Swainson's Thrush, Golden-winged Warbler, Blue-winged Warbler, Blackpoll Warbler, Slate-colored Junco.) **Olive-sided Flycatcher** (GRMacC) was observed at close range and positively identified by song. Scaup were Lesser Scaup.—David Barnes, Dr. and Mrs. C. H. Blake, Mrs. J. Favre, Mr. and Mrs. A. Fristoe, Dr. and Mrs. F. Harper, R. H. Helle, Mrs. P. R. Hunter, Stella Lyons, Dr. and Mrs. G. R. MacCarthy, Mrs. W. D. Patterson, W. B. Sanders, Dr. and Mrs. D. Seanor, Mr. and Mrs. R. B. Sharpe, Lloyd Shaw, Mrs. P. Stewart, Mrs. R. P. Teulings, R. P. Teulings (compiler), Mr. and Mrs. M. L. Thompson, Mrs. H. W. Walters, Edmund Welch, Mr. and Mrs. D. Yount.

Charleston, S. C. (all points within a 15-mile diameter circle centered 14 miles NE of Mt. Pleasant and ½ mile East of U. S. Hwy 17, to include Bull's Island, and extending NW across adjacent waters and marshes and the mainland opposite; fresh water ponds and wooded swamps 25%, mixed and pine woods 25%, fields and farmland 20%, salt-water creeks, marshes and flats 25%, dunes and ocean 5%).—2 May; 6:30 AM to 3:30 PM. Rain all day; temp. 60-64°; wind EbNE, 5-20 mph. Twenty observers in 5 parties. Total party-hours, 46.5 (15 by car, 1 by boat, 30.5 on foot); total party-miles, 175 (141 by car, 2.5 by boat, 31.5 on foot). **Total species, 125; total individuals, 2,270.** Bad weather cut total species probably 10-15%, and total individuals some 60-75%.—Mr. and Mrs. Francis Barrington, T. A. Beckett III, E. L. Blitch, B. R. Chamberlain, David Chamberlain, E. B. Chamberlain (compiler), N. A. Chamberlain, E. C. Clyde, A. S. Cochran, Mrs. R. H. Coleman, E. S. Dingle, Mrs. L. M. Glover, Julian Harrison, I. S. H. Metcalf, Mrs. M. D. Richardson, Elizabeth Simons, Mr. and Mrs. John Simmons, H. A. Wright.

Charlotte, N. C. (all points within a 15-mile diameter circle centered at the intersection of Highway 21 and Woodlawn Avenue, to include Lake Wylie which was not in the previous count area; open fields and farmland 45%, deciduous-pine woods and edge 35%, city parks and lawns 10%, lakes and ponds 10%).—9 May; 4:15 AM to 8:30 PM. Party cloudy; temp. 63-88°; wind very slight. Fourteen observers in 5 parties. Total party-hours, 46 (8 by car, 38 on foot); total party-miles, 211 (190 by car, 21 on foot). **Total**

species, 102; total individuals, 2,936.—Mrs. M. J. Barber, Dr. and Mrs. W. G. Cobey, Mr. and Mrs. A. H. Dykema, May Fraley, Mr. and Mrs. J. P. Hamilton, Lee Jones (compiler), Mrs. A. A. Kittinger, Mr. and Mrs. J. R. Norwood, Mrs. J. C. Pfohl, Mrs. George C. Potter.

Fayetteville, Cumberland County, N. C. (all points within a 15-mile diameter circle centered at Market Square; deciduous-pine woods, swamps, lakes and ponds, open fields and farmland, city lots).—3 May; 5:30 AM to 6 PM. Cold, windy, steady rain until 5 PM; temp. 49-61°. Fourteen observers in 3 parties, 5 individuals working own yards. Total party-hours, 42; total party-miles, 84 (80 by car, 4 on foot). **Total species, 87; total individuals, 4,141.** Weather conditions made this the poorest day for bird watching that we have ever had for a count day.—Derb Carter, Mrs. Jonathan Courtney, Mrs. Charles T. Haigh, Mrs. Charles T. Haigh Jr., Doris C. Hauser, Mrs. Caldwell Huske, Catsie Huske, Lillie Poe, Helen McGeachy, Henry Rankin, Mrs. S. C. Rankin, Mrs. J. A. Shaw (compiler), Mrs. W. E. Whiddon.

Greensboro, N. C. (all points within a 15-mile diameter circle centered ½ mile SW of WBIG transmitter; deciduous and pine woods 25%, thickets 20%, fresh-water lakes and ponds 30%, open fields 10%, marsh and wooded swamps 10%, lawns and parks 5%).—2 May; 4:30 AM to 7:30 PM. Cloudy, cool; temp. 47-54°; wind NbNE 13-16 mph. Thirty observers in ten parties. Total party-hours 111 (59 by car, 52 on foot); total party-miles, 346 (305 by car, 41 on foot). **Total species, 146; total individuals, 10,966. Wilson's Warbler** (IM, EMcN) positively identified. Considering the weather, an excellent count, second highest number of species ever recorded on Spring Count at Greensboro. Lack of sandpipers kept list from going over 150 species.—Helen Bedon, John Carr, Mrs. D. A. Cason, Ellene Cobb, Inez Coldwell, Larry Crawford, Kelly Culbreth, Charlotte Dawley, Mrs. R. D. Douglas, Brad Hawkins (compiler), Sidney Holmes, Mrs. C. L. Knight, Robert Lasley, Mrs. R. S. Lennon, Mrs. Robert McCoy, Ethel McNairy, James Mattocks, Ida Mitchell, Elizabeth Ogburn, Mrs. D. A. Parsons, Penny Parsons, Etta Schiffman, Mrs. Wm. Sewell, Charles Sheridan, Ruth Sikes, George Smith, Mrs. W. F. Smyre, Thomas Street, Mrs. C. R. Suratt, Mrs. R. H. Weisner (Members and guests of Piedmont Bird Club).

Henderson, Vance County, N. C. (all points within a 15-mile diameter circle centered at Henderson; meadow lands, open fields, wooded lands, and lake front).—2 May; 7:30 AM to 5:00 PM. Cloudy; temp. 48-58°; wind 12-15 mph. Six observers in 1 party, 2 individuals working own yards. Total party-hours, 9 (2 by car, 7 on foot); total party-miles, 96 (80 by car, 16 on foot). **Total species, 85; total individuals, 1,376.** (Seen in area during count period but not on count day: Rose-breasted Grosbeak.) The largest number of swallows ever seen in this vicinity, estimated to be in the thousands, was the outstanding feature of this census.—Neita Allen, Jeannette Bachman, Mary Frances Chavasse, Mariel Gary, May Hunter (compiler), Garnette Myers.

Hilton Head Island, S. C. (all points within a 15-mile diameter circle centered at Hilton Head Island Post Office, including parts of Bluffton, Pinckney Island; mixed woods 25%, field and fresh ponds 25%, ocean and beach 20%, pine woods 5%, tidal rivers, creeks and mudflats 25%).—25 April, 5:30 AM to 5:30 PM. Rain 8-11 AM, cloudy; temp. 64-74°; wind SW 8-18 mph. Twenty-nine observers in 9 parties, 2 individuals working own yards. Total party-hours, 73.5 (30.5 by car, 2 by bike, 41 on foot); total party-miles, 259 (218 by car, 4 by bike, 37 on foot). **Total species, 142; total individuals, 7,980.** (Seen in area during count period but not on count day: Least Bittern, **White-winged Scoter,** Knot, Yellow-bellied Sapsucker, **Gray Kingbird,** Brown-headed Nuthatch, Blackpoll Warbler, Bobolink, Scarlet Tanager, Rose-breasted Grosbeak.) **Gannet** (IRT), **Swallow-tailed Kite** (NB), Sparrow Hawk (CN), and Veery (FH, CI) were all seen under good conditions.—Mr. and Mrs. W. H. Branch, Nancy Butler, Dr. and Mrs.

Maurice Charnock, Polly Cloud, Sheila Cole, Violet Duane, Mr. and Mrs. Fred Hack, Orion Hack, Mr. and Mrs. David Harrall, Florence Harry, Mr. and Mrs. Anthony Helling, Alva Hines, Mrs. Henry Lawrence, Charlotte Inglesby, Edith Inglesby, Caroline Newhall (compiler), Anne Reddy, Mr. and Mrs. C. S. Sergeant, Mr. and Mrs. R. Connor Tedards, Ivan R. Tomkins, Alice Woodring, Harry Yeatman.

Iredell County, N. C. (all points within a 15-mile diameter circle centered at junction of Hanes Grove Road and Rural 1872; 40% open farmland, 25% lowlands and river bottoms, 35% deciduous forest).—26 April; 4:30 AM to 5:00 PM. Overcast; temp. 45-55°; wind calm to 5 mph, WbSW. Ten observers in 4 parties. Total party-hours, 40 (13 by car, 27 on foot); total party-miles, 152 (130 by car, 22 on foot). **Total species, 95; total individuals, 3,571.** (Seen in area during count period but not on count day: nesting Pileated Woodpeckers, Prothonotary Warblers.) Military maneuvers prevented access to a productive tract of several thousand acres of wooded bottomland along the South Yadkin River.—Mrs. Ralph Goforth, Fred Hinton, John Melson, Anne Presnell, Mrs. James P. Rines, Chip Shafer, Mark Simpson Jr. (compiler), Pat Thomas, Ronnie Underwood, Rick Young.

Morehead City, Carteret County, N. C. (all points within a 15-mile diameter circle centered at Crab Point Intersection; tidal creeks, river and sound 60%, residential 2.5%, fresh water ponds and creeks 2.5%, mixed and pine woods 20%, fields and open areas 10%, ocean front 5%).—25 April; 5 AM to 6 PM. Cloudy, windy and cool; temp. 61-67°; wind NE to NbNE 10-30 mph. Five observers in 3 parties. Total party-hours, 36 (6 by car, 30 on foot); total party-miles, 91 (63 by car, 28 on foot). **Total species, 112; total individuals, 4,054.** (Seen in area during count period but not on count day: **Piping Plover**, Ruddy Turnstone.) The two Evening Grosbeaks are noteworthy. The **Redhead** (DB, TW) was a cripple.—David Barnes, Mr. and Mrs. John Fussell, John Fussell III (compiler), Tommy Wade.

New Bern, N. C. (all points within a 15-mile diameter circle centered at New Bern Airport, to include Neuse River from mouth of Broad Creek to Street's Ferry, New Bern, Trent River to Hardison farm; fields and marsh 40%, mixed woods 30%, residential 15%, open water 15%).—26 April; 5:30 AM to 6:30 PM. Clear and cool; temp. 50-75°; wind NE to E 5-15 mph. Fourteen observers in 5 parties. Total party-hours, 41 (6 by car, 1 by boat, 34 on foot); total party-miles, 238 (213 by car, 3 by boat, 22 on foot). **Total species, 108; total individuals, 4,257.**—Ethel Barkley, Fred Conderman, Margaret Conderman, Alan Connelly, Geraldine Cox, Megs Gardner, Gladys Hall, Robert Holmes, M.D. (compiler), Alex Meadows, Sue Meadows, Allen Frank Olmstead, Frank Olmstead, Jenny Olmstead, Sam Sweeny.

Raleigh, Wake County, N. C. (all points within a 15-mile diameter circle centered at the State Capitol Building; practically the same as previous count; lakes and small ponds 25 %, pine woods 5%, mixed pine and deciduous woodlands 35%, deciduous woodland 20%, open fields 10%, pasture 5%).—2 May; 5 AM to 9 PM. Cloudy practically all day with a heavy overcast in AM; temp. 48-65°; wind 5-8 mph, practically calm in PM. Twenty-five observers in 9 parties, 5 individuals working own yards. Total party-hours, 77.5 (24 by car, 53.5 on foot); total party-miles, 231 (196 by car, 35 on foot). **Total species, 148; total individuals, 13,925.** (Seen in area during count period but not on count day: Golden-winged Warbler by RH, Horned Lark by JFP.) Unusually large congregation of **Bank Swallows.**—Mrs. H. H. Brandt, Mrs. C. J. Carstens, H. T. Davis, Mrs. L. Dillard, M. Browne, J. Erickson, S. Fretwell, J. F. Greene, R. Hader, Mrs. I. Hostettler, J. Hunt, Mrs. B. Jones, L. Jones, J. L. Lamson, Mrs. J. L. Lamson, J. Meadows, J. F. Parnell (co-compiler), E. Potter, J. Potter, T. L. Quay, F. Roberts, M. Thompson, Mrs. E. W. Winkler, Mrs. D. L. Wray, D. L. Wray (co-compiler).

Rocky Mount, N. C. (all points within a 15-mile diameter circle centered at Goldrock Community in Nash County and including part of Edgecombe County; fields and roadsides 40%, lakes and ponds 20%, mixed woods 25%, swamps and marshes 15%.)—3 May; 11:30 AM to 7 PM. Cloudy; temp. 60-68°; wind NE. Four observers in 1 party. Total party-hours, 7 (3 by car, 4 on foot); total party miles, 73 (65 by car, 8 on foot). **Total species, 63; total individuals, 3,017.** Appearance of a **Least Tern** this far inland can possibly be explained by the fact that a severe northeaster has been blowing on the coast for the past week, and according to the newspaper, winds up to 100 mph hit the Southport area about 9 AM on the count day. As to the large number of **Barn and Tree Swallows**, these figures are very conservative since swallows were in the midst of a migration of the magnitude that none of us had ever seen before.—Bert Carter, Carr Speight, Sarah Speight, John L. Thompson (compiler).

Stanly County, N. C. (all points within a 15-mile diameter circle centered about two miles NW of Badin; deciduous woodlands 5%, open field and farmland 30%, ponds, lakes and rivers 30%, mixed woods and edges 18%, city lawns 10%, marsh 2%, pine woods 5%).—9 May; 4:30 AM to 7:00 PM. Fair to partly cloudy, mild; temp. 60-90°; wind NW 10 mph. Thirteen observers in 5 parties, 23 individuals working own yards. Total party-hours, 71 (10 by car, 7 by boat, 54 on foot); total party-miles, 257 (188 by car, 33 by boat, 36 on foot). **Total species, 111; total individuals,** 4,627. (Seen in area during count period but not on count day: Evening Grosbeak.) Tucker Town Lake was covered by boat for the first time on a count. This is where the **Caspian Terns** (BC, JW) were found. **Turkeys** were in Morrow Mountain State Park.—Mr. and Mrs. Roy Blalock, George Culp, Margaret Crawley, Mrs. Barrett Crook, Barrett Crook, Wade Crowell, Mr. and Mrs. Rudloph Gereg, C. M. Haithcock, Mr. and Mrs. Louis Hartung Jr., Mr. and Mrs. Claude Hinson, Myrtle Isenhour, Maxine Isenhour, Ruth Kerns, Mrs. Kemp Littleton, Donald Maner, Barbara Maner, Gladys Mason, Vera Mason, Doris Mauney, Paine Misenheimer, Mr. and Mrs. Heath Morgan, Mrs. William Mount, Ann Nielson, Sue Parker, Mrs. J. E. Pennington, Spencer Plyler, Addie Thompson, John Whitlock, Vivian Whitlock (compiler), Bennie Winget.

Wayne County, N. C. (all points within a 15-mile diameter circle centered at Indian Springs in southern Wayne County to include Seven Springs, Mt. Olive and Sleepy Creek; fields and roadsides 45%, lakes and ponds 17%, mixed woodlands 20%, marsh and wooded swamps 15%, feeders 3%).—29 April; 5 AM to 6 PM. Fair; temp. 64-82°; wind 5-10 mph. Three observers in 1 party. Total party-hours, 12 (6 by car, 6 on foot); total party-miles, 135 (125 by car, 10 on foot). **Total species, 82; total individuals, 836.** (Seen in area during count period but not on count day: Common Egret, Blue-winged Teal, Red-shouldered Hawk, Common Gallinule, Least Sandpiper, Semipalmated Sandpiper, Barred Owl, Hairy Woodpecker, Tree Swallow, Veery, Black-throated Blue Warbler, Kentucky Warbler, Field Sparrow, Swamp Sparrow.)—Margaret Davis, Richard H. Siler (compiler), Margaret Walker.

Wilmington, N. C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction, including Wrightsville Beach, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, Greenfield Lake, Echo Dairy Farm; mixed pine and deciduous woodland 40%, beach and salt marsh 35%, fresh water ponds and river 20%, pasture 5%).—25 April; 4:00 AM to 6:00 PM. Rainy and windy; temp. 50-62°; wind NE 13.6-22 mph. Eight observers in 5 parties. Total party-hours, 41.5 (29.5 by car, 12 on foot); total party-miles 332 (313 by car, 19 on foot). **Total species, 127; total individuals, 4,395.**—Katharine Alexander, Dot Earle (compiler), Betty Everson, Greg Massey, Polly Mebane, Birdie Menzer, Mary Urich, Marie Vander Schalie.

Backyard Birding

Annie Rivers Faver
Department Editor

From the Log of Critter Rest, Wadmalaw Island, South Carolina—7 May 1964. A female Red-breasted Merganser dropped into the fresh water pond a stone throw from our back porch this morning at about ten o'clock. I was busy pulling a new growth of alligator weed along the edge of the dam and nearly waist deep in the water. Apparently the bird did not see me until it hit the water, a scant 20 feet away. It did not panic but promptly began to swim away, eyeing me frequently over its back. Due to the weed growth, the open water where the merganser came in is hardly 30 feet wide, but it is better than 150 feet long. It continued to move away, and when it was about 100 feet distant, it turned almost directly toward me and after a very brief moment of hesitation lunged forward. With rapid wing action and a considerable amount of paddling it finally cleared the water and passed at a high rate of speed within 15 feet of me, barely high enough to clear the dam. I lost sight of it as it dropped low and turned down the salt creek bordering our lawn.—B. R. Chamberlain.

What Wrens are Where?

Mrs. D. A. Lacross of 1454 Alexander Road, Rock Hill, South Carolina, brought up the following. She wrote:

Dear Mrs. Faver,

When we first moved to South Carolina in 1949 the Carolina Wren seemed to be far the most common wren in yards—nesting in gourds, birdhouses, and any available object of convenient shape. Year by year the House Wren has become more common here, and now we seldom see the Carolina Wrens around the yard or in town, though I hear them by the roadside whenever I drive out of town.

I am curious to know whether the House Wren always replaces the Carolina when the territory is extended in the Carolina area or if my observations are just chance. I'd be interested in hearing from other readers of *The Chat* on this subject.

J. Weston Clinard's Front Porch Birding

As is our usual custom, my wife and I have just spent about six weeks of June and July at Hazel's ancestral home in the foothills of Virginia. The house, built by her grandfather, was left completely furnished by her late parents. We just drive 150 miles from our home in Hickory, North Carolina, and go to housekeeping. The home stands right in the middle of a 400-acre, thickly forested plantation about five miles east of Martinsville, Virginia. It is also far enough from the Danville highway that the noise does not annoy us.

The most enjoyable hours of our daily routine, after the necessary chores are done, are spent on the spacious front porch which we had screened against undesirable insects. The house faces east. We take our comfortable seats when the sun is casting its last shadows. It is amusing to observe the changing patterns made by the huge trees; but our attentions are drawn to the vespers of the birds.

The chorus seems to have a fixed program. The "opening numbers" are rendered by the House Wrens, the Carolina Wrens, Wood Pewees, phoebes, Cardinals, and Mockingbirds. The intermediate renditions are done by the Yellow-breasted Chats, the Wood Thrushes, Robins, and the Bobwhites, which also close their parts with their assembly calls.

Then as the shadows are covered with darkness, comes the Grand Finale to which we have been looking forward. There is a short "introduction," when all other sounds have ceased, by the tree frogs, crickets, cicadas and katydids. Now comes a solo from a distance, the "words" of which beseech, "Whip poor Will." The "request" is taken up by many of these night birds with variations noted in the call of each individuals.

During the entire concert by the all-star cast, the "background music" is furnished for the lulls and intermissions by Chipping Sparrows, Field Sparrows, goldfinches, flickers, meadowlarks, and the percussion section of the orchestra is taken over by various woodpeckers.

We made a list of the various birds we have identified by sight and their calls around the home, not counting others we have seen on our drives in that section. Our list contains fifty species. It is also remarkable that there are no House Sparrows nor Starlings on the premises. We are glad to report, however, that a pair of bluebirds were seen with a large brood just off the nest.

More About Siskins

Evening Grosbeaks returned to our feeder January 6, 1964, and as if this weren't excitement enough, they were followed a month later (February 9) by a flock of at least 100 Pine Siskins, the first ever recorded in Zebulon, North Carolina. My husband and I soon discovered that Pine Siskins are extremely aggressive little birds whether they are feeding with their own species or in mixed flocks. At our feeding station one particularly spunky male seemed to rule the flock, and he used all the threatening displays so well described by Margaret Sandburg in the June *Chat.* Day after day he would take a position at the peak of a large pile of sunflower seeds and, with head lowered and wings raised, he would charge any other bird which approached.

We were particularly interested in the way "our" siskins reacted to the presence of various other species. Generally they tolerated the much larger Evening Grosbeaks, and many seemed contented to pick up the "crumbs" left on the feeder by the grosbeaks. (In fact, for the first few days the siskins didn't seem to know how to open sunflower seeds efficiently.) Sometimes two or more siskins would "gang up" on a grosbeak which annoyed them, but most of the time the two species fed together with remarkably little bickering.

Siskins absolutely refused to tolerate the House Sparrows. Sometimes a week would pass without our seeing a single House Sparrow at the feeders although a large flock continued to roost in an abandoned garage next door. They were so thoroughly intimidated that they did not return in their usual numbers until several days after the last siskin had departed. Purple Finches were not popular with siskins either; but they continued to visit the station regularly though in reduced numbers.

The siskins appeared to ignore the Myrtle Warblers, but they always gave the Baltimore Orioles plenty of room. A lone oriole had only to make a feeble threat to send dozens of siskins flitting away. The morning of February 14 an oriole was caught in a banding trap. A cat approached, and the frightened bird—unable to escape even though the door was ajar—fluttered wildly about the cage. Until I went to the rescue, one cocky siskin sat calmly on top of the cage, within easy reach of the cat, intently watching the plight of the oriole. Of course not even siskins can show emotions, but I can't help wondering if that fool-hardy little bird deliberately sat there just to show its contempt for the oriole which had chased it from the feeder so many, many times.—ELOISE POTTER

A Bird in the Box's Worth Two in the Bush

Reporter Bob Lynch and the publishers of the Raleigh (N. C.) *News and Observer* have given permission for the reprinting of the following story which appeared in that paper April 24, 1964.

"Mr. Mailman! ! Please use rural mailbox till birds have hatched their eggs—Thank You. The Cihaks."

This note is attached to the mailbox of Mr. and Mrs. Dan L. Cihak at 2512 Remmington Rd. so that a pair of bluebirds can finish their nesting.

A week or so ago Mr. and Mrs. Bluebird went house hunting in the Rollingwood residential section. They spotted the mailbox beside the Cihak front door.

It was exactly what they wanted —a nice neighborhood with plenty of police protection. Det. Sgt. E. C. Duke lives next door. The Bluebirds decided to move in.

"At first we tried to discourage them from building a nest in the mailbox," Mrs. Cihak said. "I threw their nest out a couple of times and put the lid down so they couldn't get back in.

"But one day I forgot and left the lid open, and the bluebirds built another nest in the mailbox. We decided to let them stay. We're glad we did now.

"The day the first egg was laid, the mailman put mail in the box on top of the nest. It was then I decided to write the note."

The Cihaks, before moving to Rollingwood subdivision, had lived on a rural route, and had saved their rural mailbox.

Mrs. Cihak dug the rural mailbox out of the utility room and placed it on the porch for the mailman.

"There are now four eggs in the nest. The mama bird has laid an egg each night for the past four nights," Mrs. Cihak explained.

When are the new additions to the Bluebird family expected to arrive?

That depends on how much delivery is affected by the Zip Code.

(Mrs. Cihak reports that a fifth egg was laid soon after Mr. Lynch visited the nest, and incubation continued until tragedy struck about a week before hatching was expected. One morning blue feathers were found beneath the box, which was low enough for a cat to reach. The eggs were left undisturbed for several days, but the bluebirds were not seen at the box again. The Cihaks plan to place a properly designed nesting box in their yard in hopes that they will have bluebird neighbors again next spring.—*Dept. Ed.*)

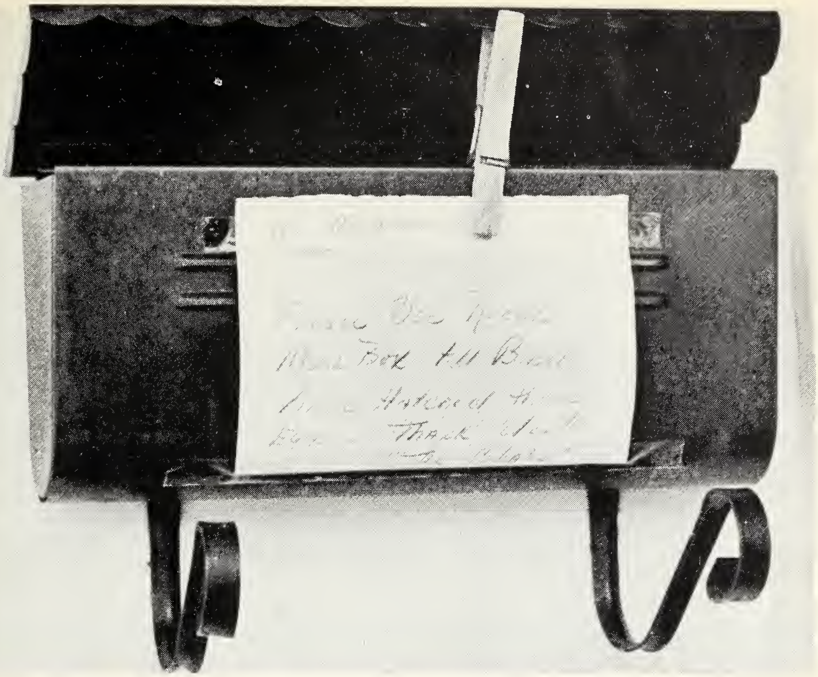
Baldy and the Peacocks

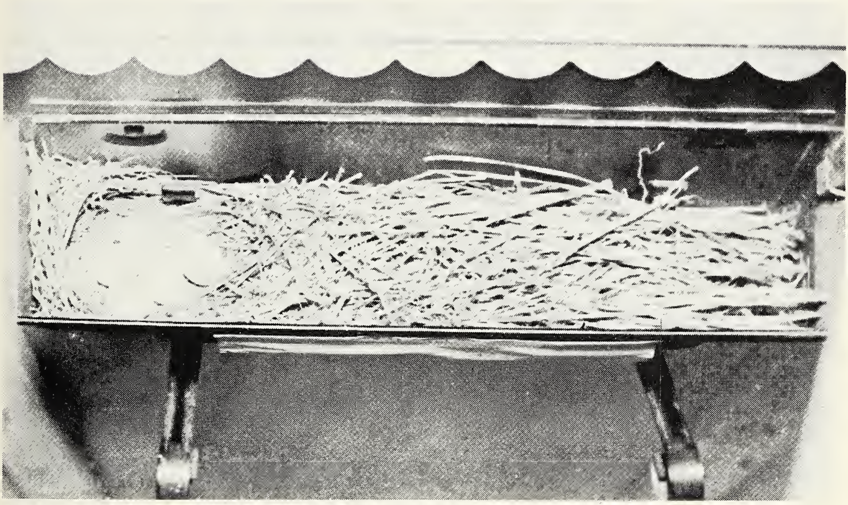
Stories of pets strange to our backyards often come our way. Mrs. R. A. Braddy of Dillon, South Carolina, sent me a clipping from the *News and Courier* in which Eppie Richbourg, a special correspondent, told of a pet eagle having been nursed to health after an accident. The James L. Peacock family has cared for the bird, which was injured by gunshot.

(Continued on Page 117)

RIGHT, ABOVE—Note attached to mailbox to protect nesting bluebirds.

RIGHT, BELOW—Inside the mailbox four (later five) bluebird eggs rest on pine needles. Notice how the bottom of the box is completely covered with nesting material. (Photos by Bob Lynch, Raleigh **News and Observer**)





WINTERING BALTIMORE ORIOLE STUDY

JOHN E. ERICKSON AND T. L. QUAY

The Baltimore Oriole (*Icterus galbula* [Linnaeus]) is a common nesting bird of central and northeastern United States, including the mountains of North Carolina. The wintering grounds are in the tropics, from southern Mexico through Central America to Columbia, South America. In recent years, however, especially since about 1949, small numbers of Baltimore Orioles have been recorded regularly during the winter in the Atlantic seaboard states, with a possible center of abundance in North Carolina.

T. L. Quay has been studying these wintering orioles in North Carolina since 1951, and has found them to occur at feeding stations in suburban environments in over 30 cities and towns in the lower Piedmont, Sandhills, and Coastal Plain regions of the State. He has corresponded with over 100 cooperators, people who feed the birds, make observations, and submit records. This research has provided basic information on minimum numbers, habitat relations, food habits, arrival and departure dates, some general behavior patterns, and relations with other species. Limited banding at Raleigh and Fayetteville has shown that at least some of these orioles return to the same local areas from one winter to the next.

Presence of Baltimore Orioles in the Carolinas in winter, apparently in increasing numbers as the years go by, raises many questions. To begin to answer some of these questions we have initiated a new study to determine, primarily by use of live-trapping and color-banding methods, the following:

1. The size of the population, which is probably much larger than the presently known minimum numbers.
2. The ranges of individual birds during the winter.
3. The rate of return of banded orioles to the same wintering areas in subsequent years.
4. The precise time and sequence of the spring molt.
5. Behavior, especially during the months of March and April as the orioles come into migratory condition, break into the first spring song, and prepare to leave for the nesting grounds.
6. Preferred winter habitat of these birds and basis for habitat selection.

A preliminary habitat analysis was carried out this past summer, in the principal study locations—Chapel Hill, Fayetteville, Fremont, Goldsboro, Mount Olive, Rocky Mount, and Zebulon; all chosen on the basis of abundance of wintering orioles and closeness to our home base in Raleigh. Traps, bands, and banding pliers have been distributed to the 15 selected participants, in the eight study areas, who have agreed to operate banding stations in their respective yards and have been trained in preparation for the banding of orioles during the winters of 1964-65 and 1965-66. To simplify identification and avoid complications, each town will have the same series of color combinations; but every bird will have a different numbered aluminum (U. S. Fish and Wildlife Service) band. We are hoping to band at least 400 orioles in each of the next two winters, and thus establish a sound basis for determining the status of this new wintering population.

Everyone who is interested and willing to join with us as a cooperator is urged to be on the lookout for color-banded orioles, to keep daily records throughout the winter in accordance with the six objectives listed above, and to let us know as soon as you see your first banded oriole this coming winter. We will send you an immediate response, and then come to visit with you in person. We shall be very grateful for your assistance. Please address all correspondence to John Erickson, who is conducting the present study as a graduate thesis in Zoology.

Department of Zoology
North Carolina State of the University of North Carolina at Raleigh
1 September 1964

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

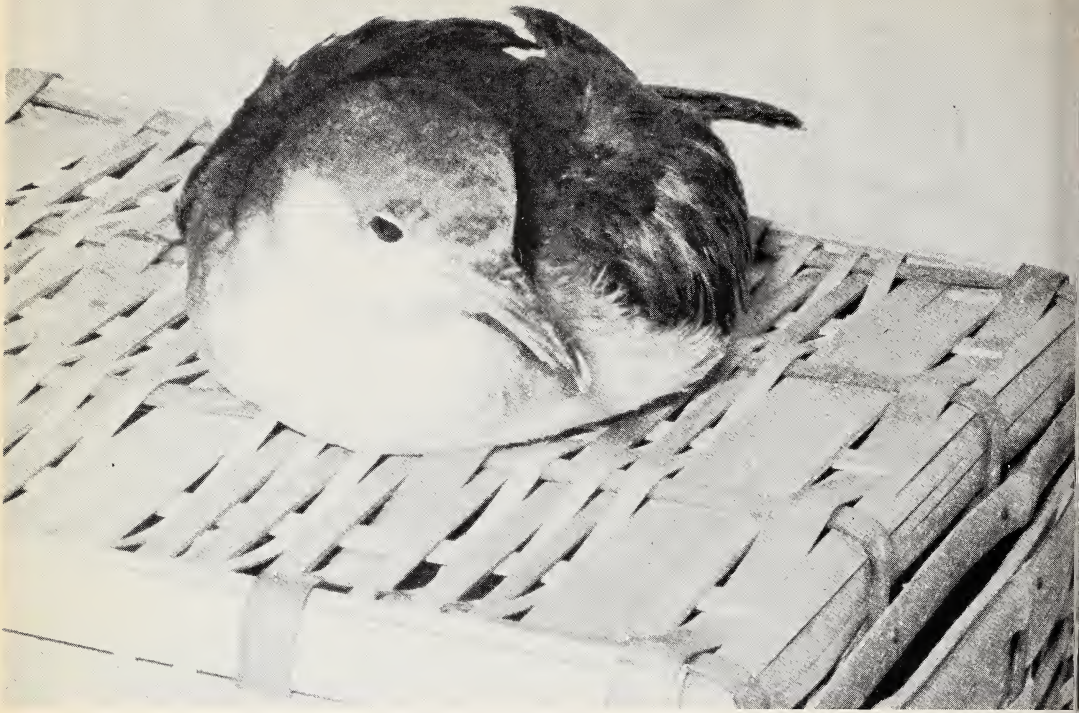
Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Notes on an Audubon's Shearwater at Charleston, South Carolina.—The Audubon's Shearwater (*Puffinus lherminieri*) is a fairly common species off the Carolina coast in summer. At least two dozen specimens have been found dead, or dying, on our South Carolina beaches (and others off North Carolina) during the past 50 years. Most have been found after storms and in emaciated condition. With offshore habits, comparatively few have been noted within our harbors or from our beaches.

In the June 1964 issue of *The Chat,* Anne Worsham Richardson gives an interesting account of a crippled Audubon's Shearwater found by Jeff Belknap in the surf on the Isle of Palms, Charleston County, South Carolina on 1 August 1963. A number of bird students saw this bird while it was in Mrs. Richardson's care, until its death (from unknown causes) on 10 April 1964. Thus it was kept alive for over eight months. This specimen is now Ch.M.No. 64.22, in the collections of The Charleston Museum. The bird is a male, length 310 mm, wing 189 mm, bill 33 mm, and tarsus 35 mm. Testes 9 x 5 x 2 mm. No fat.

Behavior: There is little to add to Mrs. Richardson's account. The bird's tameness was indeed striking, from the start of captivity. Apparently calm and curious, it would nibble gently on an offered finger. When rubbed on the side of the head, near the ear opening, the bird would close its eye and turn its head down, in effect holding a slight pressure against the "soothing" finger. One was reminded of a pet dog's reaction when an ear was being rubbed. When the family dog, a large one of dubious ancestry, came into the room to lie on the floor, the shearwater frequently would "crawl"



An Audubon's Shearwater found injured near Charleston, South Carolina, 1 August 1963 is pictured resting upon its covered basket while living in captivity at the home of Anne Worsham Richardson. (Photo by Mrs. Robert A. Brown)

over and sit close beside it. The dog tolerated this, but resented such an approach by other pets.

Most active at night, in the daytime this bird showed a preference for dark places, beneath a stool, or behind a bookcase. (The suggestion was made that perhaps the bird's eyes might reflect light, but, using a flashlight at night, Mrs. Richardson was unable to get a positive reaction.) The bird appeared to like to stay in a pocket of Mrs. Richardson's house coat or apron and seemed to "enjoy" attention.

The feathering appeared in good condition until the house was heated for the winter. Then, perhaps by coincidence, the bird appeared duller in plumage and by January was molting a little. Following a bath (at least daily), the feathers showed their normal sheen. Because of the loss of its left leg, the bird seemed unable to reach the area of the left eye, and that side of the head did not present a well groomed look.

Apparently somewhat frail, the bird was a light eater. Of necessity it was force fed on the first day. Thereafter it usually refused food until enticed and hand fed by Mrs. Richardson. It was usually fed about four times during the day and twice at night, and on occasion would forego food for a day or two. Once, left with sympathetic friends, it refused food for three days. On 7 January, it weighed 196 g (7.0 oz).

Description: Mrs. Richardson's report is adequate. As stated, the eyes were black, with a bluish cast. The bill horn colored, grading into grayish blue at the head. Tarsus and foot webbing were pale flesh, distinctly tinged with lavender. The toes and ventral edge of tarsus were black.

With reference to the bill, tarsus, and foot coloring of the living bird it is worthwhile to point out that while Palmer (1962) is in close agreement with this description, excepting the lavender coloring, there are certain disparities in some of the literature on the species even among such authors as Chapman (1914), Bent (1922), and Peterson, et al. (1954). In three Charleston Museum specimens, collected between 1910 and 1958, the bills, legs, and feet are now very dark, if not black. Only one shows a very slight trace of lavender on the webbing.

Parasites: Inadvertently, the "mites" (actually lice) collected by Mrs. Richardson from "her" shearwater were discarded (not by Mrs. R.). In order to obtain some information on the parasites hosted by Audubon's Shearwater, a dozen or so were removed from a 1938 study skin (Ch.M. 38.255—Edisto Beach, S. C.) in The Charleston Museum and submitted to the U. S. National Museum for determination. With one exception these old parasites appeared similar (at least to a non-professional) to the lice collected by Mrs. Richardson. These specimens have been identified by K. C. Emerson as mallophagan lice (*Halipeurus inestatus* Timmerman), previously known, I believe, from this host. The exception mentioned above was "tick like" in appearance, and it has been identified by W. T. Atyeo as a mite (*Laminalloptes simplex* [Trouessart]). However, he doubts the validity of the host record with the statement, "Question collecting data . . . as this genus of mites reported only from birds of the genus *Phaeton* (one case—*Fregata*)." It was suggested that in a study collection parasites might become transferred from one skin to another. In the present case it is to be conceded that this was a physical possibility, however improbable. The Charleston Museum collection does contain a single frigatebird skin, collected in 1906. Prior to receipt of Mrs. Richardson's shearwater, there were three Audubon's Shearwater skins, dating from 1910 to 1938. Frigatebird and shearwater skins have not been kept in the same tray, although over the years the contents of over 200 trays have often been shifted in the normal care of the more than 8,000 bird and mammal skins in the collections.

For suggestions and aid I am indebted to Anne Worsham Richardson, B. Rhett Chamberlain, N. A. Chamberlain, Messrs. Emerson and Atyeo, and to Richard C. Froeschner, the last in charge of Neuropteroids at the U. S. National Museum.

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E. BURNHAM CHAMBERLAIN, *P. O. Box 3039, St. Andrew's Branch, Charleston, South Carolina, 10 July 1964.*

Black-crowned Night Heron Feeding Behavior.—This writer has been puzzled for several years by finding in rookeries young ibis, and to a lesser degree young herons and egrets that appeared to have been killed by snakes and abandoned after unsuccessful attempts at swallowing them. The foreparts of the bodies bore evidence of this by the presence of the mucilaginous secretion that accompanies swallowing.

On 6 June 1964, during a routine banding trip to Drum Island, under the Cooper River bridge at Charleston, South Carolina, an attempt was made to band all of the young Black-crowned Night Herons (*Nycticorax nycticorax*) present before banding other species. Many of the young had been banded at the perimeter of the rookery on previous visits, but very few had been banded in the interior of the island.

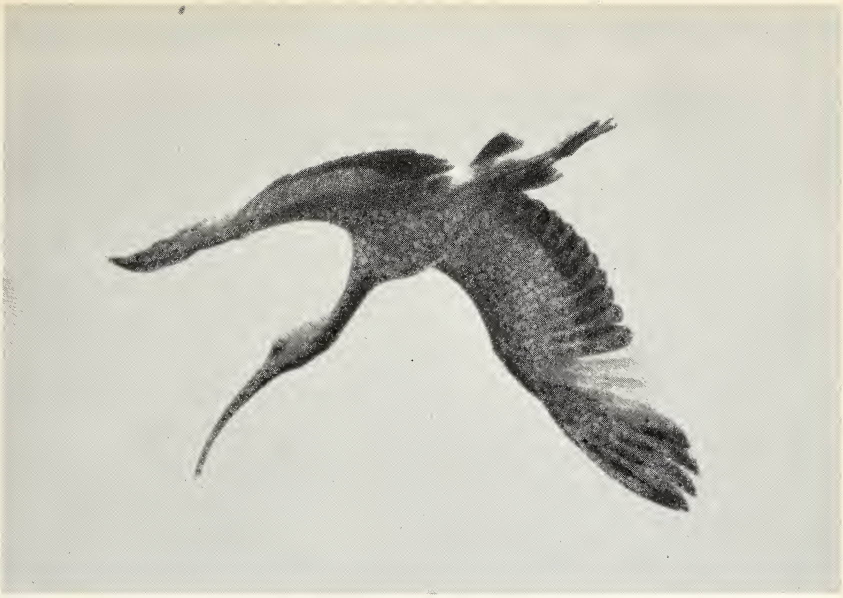
When disturbed, the young in the interior showed that the food habits of the Black-crowned Night Herons there seemed to vary from those of the birds banded at the edges. It was discovered that practically all of the young of any size had been eating nestling White Ibis (*Eudocimus albus*) and possibly a few Glossy Ibis. Due to the defense or escape behavior of regurgitating food, common to many species of birds and other animals, the evidence was abundant. Regurgitation is also resorted to when the prey is too large to permit complete swallowing.

Here the results could not be attributed to snakes. I have never seen a single snake in my many visits to Drum Island. A rather strange thing was observed, however, and that was the fact that sometimes if the victim was very large, the front half of the regurgitated body was missing, whereas the legs and rear portions were only partially or not at all digested. It seems evident that a Black-crowned Night Heron does not have a bill capable of cutting the body of a nestling ibis in half but that the very strong digestive juices had assimilated the ingested portions very quickly.

On a previous visit to Drum Island, on 30 May, a young Black-crowned Night Heron with a twisted leg was observed on the ground beneath a nest. It was not banded because it was felt there was very little chance for survival with the leg deformity. On 6 June this same nestling, apparently, was seen. From its mouth dangled a young White Ibis about two weeks old. The young heron was making every attempt to disgorge the ibis but was unsuccessful in bringing up the head with the large bill. It was readily evident that the young ibis had been recently killed, but when the front portions of the ingested body were examined they showed evidence of a rapid break down in skin and tissue. Around this young heron were the remains of two other ibis which had been swallowed to the point of wing attachment and regurgitated.

Approximately 100 to 150 pairs of Black-crowned Night Herons nested on Drum Island in 1964. The White Ibis population was 3,000 to 4,000 pairs. Between 50 and 60 disgorged young White Ibis were seen. It is believed by this writer that the readily available food supply is used by the parent bird once the young Black-crowned Night Herons are large enough to consume it. This raises three interesting questions: (1) Does the consumption of nestlings of other species cut down on the nestling mortality among littermates due to cannibalistic tendencies observed in this and other species? (2) Is this species influenced in nesting with other species because of the additional available food? (3) Do large numbers of adult Black-crowned Night Herons remain in this particular colony after the regular nesting season to feed on the young of other species, particularly those of the late-nesting Cattle Egret? While it is possible that all three questions may eventually be answered in the affirmative, more investigation is necessary before a positive statement can be made.—THEODORE A. BECKETT III, *Magnolia Gardens, John's Island, South Carolina, 5 July 1964.*

White Ibis Observations in North Carolina.—Noting the low water level and the exposed marshy bank of Lake Johnson in Wake County, North Carolina, we visited the lake at 4 PM the afternoon of 15 July 1964, to look for shore birds. At the head of the lake were two Snowy Egrets, feeding and preening at the water's edge. Several Killdeer were feeding with the egrets. From the causeway across the middle of the lake we saw a large number of birds feeding along a stretch of exposed edge. Among those were seven immature Little Blue Herons, one mature Little Blue Heron, three American Crows (identified by call), several Killdeer and Red-winged Blackbirds, and one subadult White Ibis. Viewed through a 60 X spotting scope, the ibis closely resembled the plate in *The Audubon Water Bird Guide* (Pough, 1951) except that this individual had a dark pink bill which was starting to take on the solid color of the adult. Also noted was a single wingbar on the grey-brown wings. The accompanying photograph by Jack Potter taken at Battery Island, North Carolina, on 1 June 1963, portrays this bar very well. This "bar" is actually the beginning of the molt, the completion of which will result in the adult plumage.



A subadult White Ibis in flight showing an early stage in the molt which results in the adult plumage. Photo made by Jack Potter at Battery Island, Brunswick County, North Carolina 1 June 1963.

According to *Birds of North Carolina* (Pearson, Brimley, and Brimley, 1959) 11 records of the White Ibis have been added since 1939, all being coastal except two: Winston-Salem (two immature birds on 19 July 1953) and Clinton (one immature bird on 14 August 1955). Nesting of the White Ibis in North Carolina was noted at Battery Island, Brunswick County, in 1963 by David A. Adams (*Chat*, 27:65-68).

According to Jack Potter (personal communication), White Ibises nested on Battery Island again in 1964, and many non-breeding subadults were also present when he visited the colony on 30 May. Potter noted that the total population of the colony was decidedly larger than on 1 June 1963 and that the waders had even begun nesting in the scattered trees located between the two established nesting areas (thickets at the southeast corner and the north end of the island). Nesting at the south end of the island was noticeably more advanced than it was at the same date the previous year with few eggs remaining in the nests and most of the young herons actively climbing and running about. Since the north end of the island was not visited, no comparison of the two areas can be made for 1964; but in 1963 nesting at the north end was more advanced than at the south end.—FRED L. JOHNS AND JOHN E. ERICKSON, *Zoology Department, North Carolina State of the University of North Carolina at Raleigh, 16 July 1964.*

Behavior of Red-tailed Hawk and Red-winged Blackbird.—While driving along Highway 133 in Brunswick County, North Carolina, the afternoon of 30 May 1964, we saw a Red-tailed Hawk (*Buteo jamaicensis*) perched in a pine tree beside the road. When we stopped the car, the bird took flight. Immediately it was pursued by two male Red-winged Blackbirds (*Agelaius phoeniceus*), one of which alighted upon the hawk's back and rode for a few seconds with wings held partly folded as if being used to maintain balance. The blackbird did not attack the hawk in any manner, and the buteo appeared undisturbed by the presence of the blackbird upon its back.

B. R. Chamberlain has called to our attention some published accounts of similar behavior among birds. Francis H. Allen once saw a Red-winged Blackbird "riding on a Crow's back for an appreciable length of time" (Bent, 1958). The Eastern Kingbird has been observed riding birds such as hawks and crows (Bent, 1942). Forbush (1939) states: "Often the Kingbird strikes the Crow, and sometimes even rides on his back while dealing out summary punishment with pointed bill."

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T. R. POTTER AND JACK POTTER, *1000 Chamberlain Street, Raleigh, North Carolina, and Box 487, Zebulon, North Carolina.*

Ground Dove Uses a Nesting Box.—On 24 May 1964 during a visit to my father's home on John's Island, Charleston County, South Carolina, I was told that a pair of Ground Doves (*Columbigallina passerina*) was nesting under a moss covered lath house used for the growing of nursery liners. It was assumed that the nest was on the ground so care was used in approaching the area in order to see the bird when it flushed.

When nearly at the expected site, I saw a bird fly laterally, just below the overhead cover of wire and Spanish moss. The nest was quickly seen. It was placed on the top of a cedar post about 4 inches in diameter and 4½ feet above the ground, and it contained two young. Due to the great depth of the nest and the apparent layered effect, it was assumed that it had been used for at least two broods.

It was decided, after the young were banded, that a better place should be made available for another nest, although it was doubtful that it would be used this season. A cigar box, actually made of cardboard, was placed on an adjacent post about 25 feet away in the lath house and promptly forgotten.

On 28 June, on another visit, I found that Ground Doves had taken my cigar box and built in it a nest composed entirely of pine needles. It contained two eggs which appeared fairly fresh. I returned to this nest on 6 July. The eggs had hatched, and I promptly banded the young birds.

I had observed an attempt at nesting by Ground Doves under a lath house at Savannah, Georgia. A great deal of nesting material was piled up around the base of a creosoted post about 10 feet tall. It had fallen from the top where the would-be nesters were trying to build on an exposed surface about 3 inches across. I was told the doves had been trying to place a nest on that post for several days.—THEODORE A. BECKETT III, *Magnolia Gardens, John's Island, South Carolina, 8 July 1964.*

Saw-whet Owl near Clemson, South Carolina.—On 1 March 1964 I observed a Saw-whet Owl (*Aegolius acadica*) by my home located three miles northeast of Clemson. The owl was sitting in my driveway at 12:15 AM when I returned home. I noticed it immediately upon entering my drive and guessed it to be a rodent, but as I drew nearer I realized something was strange for it failed to move. I approached it to a distance of 15 feet before stopping the car. Its curiosity was apparently now aroused for it turned sideways, its face being lighted by the headlamps, and revealed itself to be a small and brown "tuftless" owl. In the wing were several creamish-white markings and the underparts were streaked. The Saw-whet Owl remained "curious"; so after it turned its face toward the headlamps, then faced away again for the third time, I quietly slipped out of the car intent upon capturing it. I circled out to my left and began approaching from the side. During this time it continued periodically to turn its face toward the headlamps of the car for brief intervals. Finally, when I was 8 feet away the Saw-whet Owl took wing and silently flew off into the pine forest.—DONALD B. SNYDER, *Biology Department, Central Wesleyan College, Central, South Carolina, 18 April 1964.* (This appears to be the eighth recorded occurrence of this tiny owl in South Carolina and the second for the late winter or early spring. For a resume of those occurrences see *The Chat,* 26:41—*Dept. Ed.*)

Nashville Warbler at Aiken, South Carolina.—On Friday, 1 May 1964, at about 5:30 in the evening, I was watching the bird bath area when a strange warbler came in to use the bath. We have a plastic hose strung through a hickory and a dogwood that sends a constant trickle of water seeping down through some Spanish moss and dropping into a concrete bath set up some 30 inches on an old brick pedestal. The bird clung to the wet Spanish moss from the lower side and fluttered repeatedly in an upside down bathing position. Between baths the bird rested in the dogwood, preening its feathers. We watched it for approximately 15 minutes with 9X glasses from a distance of 30 feet. The white eye ring set in a peculiarly shaped gray area of the head, plus the yellow throat and underparts, and the olive-green back, marked it definitely as a Nashville Warbler (*Vermivora ruficapilla*).

The day was warm with a high of 82 degrees. It had clouded over in the afternoon. The site is a virgin pine hardwood forest with an understory of long and shortleaf pine, hickory, oak, gum, and poplar. The shrubs include dogwood, cherrylaurel, etc., plus planted ligustrum, camellias, and azaleas. Brush piles along the back fence provide additional cover at the edge.—JOHN B. HATCHER, *P. O. Box A, Aiken, South Carolina, 6 May 1964.* (This appears to be but the fifth recorded appearance of this rare transient in South Carolina and the first since 1940. All were spring occurrences, and two specimens have been collected. Details are recorded in *South Carolina Bird Life,* 1949.—*Dept. Ed.*)

A Brown-headed Cowbird Egg at Clemson, South Carolina.—A chance conversation under the pensile nest of a Solitary Vireo at High Hampton Inn 16 May 1964 led to what is believed to be the collection of the first cowbird egg found in South Carolina.

While several Carolina Bird Club members, attending the annual Spring Meeting, searched the branches of a large hemlock tree for the vireo nest, Mrs. Gaston Gage of Clemson revealed she had found a cowbird's egg in the nest of a Wood Thrush in a neighbor's yard.

I expressed interest in obtaining the egg for I was sure it was the first in the state. When I returned to Charleston, I received a card from Mrs. Gage saying she was sending the egg. It arrived the following day.

Mrs. Gage had found the nest containing two thrush eggs and a single cowbird egg in a holly bush on 7 May. The Gages left town the next day, but returned on 14 May to find the thrush eggs hatched.

Mr. Gage collected the egg 19 May. It had been punctured on the small end and was addled. The dark, semi-liquid contents showed no evidence of an embryo, and the egg evidently had been pecked by the foster parent bird some days earlier, arresting incubation in the early stages.

The discovery finally gives us complete and tangible evidence of the nesting of the Brown-headed Cowbird (*Molothrus ater*) in this state.

An old record, reported in *South Carolina Bird Life,* aroused suspicion of cowbird nesting. George Hudson and his class observed a foster parent bird feeding a young cowbird on the Clemson campus in 1934. Female cowbirds have been observed around Keowee and Clemson in the summer on several occasions.

It remained, however, for the Gages, who apparently have been watching the cowbirds more intently than most, to furnish the final chapter. Mr.

Gage says they have been noticing the cowbirds at Clemson for about 10 years. Their records, some of which have been reported in *The Chat*, show:

25 May 1957, Yellow-throated Vireo feeding young cowbird in the nest.
12 July 1958, immature cowbird flocking with House Sparrows.
23 July 1961, Red-eyed Vireo feeding young cowbird in a bush.

Now through the sharp eyes and kind cooperation of the Gages the first recorded cowbird egg in South Carolina is preserved.—Ernest Cutts, *1466 South Edgewater Drive, Charleston, South Carolina, 20 June 1964.*

Clay-colored Sparrow Banded on the North Carolina Coast.—For the past three years I have spent several days each fall observing and banding near Duck, Dare County, North Carolina, while participating in the annual co-operative bird-banding program known as Operation Recovery. This year my husband and I set six nets on the southside, just south of the Bombing Range at Duck. On 19 September 1963 at 8:45 AM (DST), my husband netted a Clay-colored Sparrow (*Spizella pallida*). Since I also had a Philadelphia Vireo in the net at the same time, I was more than pleased at our good fortune.

I carefully measured the Clay-colored Sparrow and compared its plumage in detail with the description given by Thomas S. Roberts in *A Manual for the Identification of the Birds of Minnesota and Neighboring States.* It was banded with a FW band, size 0, #32-67913 and released at the same location in perfect condition at 9:15 AM (DST). Although all head markings were evident, the rufous wings and indistinct crown-stripe indicate that it was probably an immature bird. The wing chord measured 61 mm, and the fat deposition was about class 2.

When I returned to Fairfax, Virginia, I consulted John Aldrich at the U. S. National Museum who confirmed my identification. He gave me the measurements of wing lengths of the Chipping Sparrow and the Clay-colored Sparrow for comparison. According to Ridgway (*The Birds of North and Middle America, Part 1*, 1901, p. 311 and 325) they follow, for adult birds, in millimeters:

Clay-colored Sparrow	male,	59.44—63.25	Average 61.21
	female,	57.91—63.75	Average 60.45
Chipping Sparrow	male,	67.31—71.12	Average 69.09
	female,	63.25—71.37	Average 67.06

In 1960, on 6 November, I was banding in the same area. Three immature Chipping Sparrows netted then had wing lengths of 67, 68, and 70 mm, and an adult measured 71 mm. I was gratified to have these measurements of live birds for comparison.

My husband and I both noted the resemblance of the Clay-colored Sparrow to the Field Sparrow in size and general proportions. This likeness was further noticed in the silky texture of the feathers. However, the basic color of soft clay and the head markings, especially the narrow line in the malar region and the dark upper mandible, gave it a different look.

According to Chandler S. Robbins of the Fish and Wildlife Service, this is the first record for the Clay-colored Sparrow in North Carolina. However its occurrence was not surprising since Paul W. Sykes Jr. reported an adult seen on Long Island at Back Bay, Virginia on 22 September 1962 (*The Raven*, 34:44, 1963).—Elizabeth D. Peacock, *200 Highland Road, Fairfax, Virginia, 3 July 1964.* (Two other sight records for Virginia are noted in *The Raven*, 28:55, 1959 and 34:6, 1963. There is no record of a specimen taken in North Carolina. *South Carolina Bird Life*, 1949, records a specimen of the Clay-colored Sparrow collected by Edward S. Dingle in Berkeley County, 27 October 1929 and added to his private collection.—*Dept. Ed.*)

White-crowned Sparrow Study at Spartanburg, South Carolina.—White-crowned Sparrows (*Zonotrichia leucophrys*) have been observed occasionally in or near Spartanburg, South Carolina, and when my wife and I purchased several acres on the edge of town in the fall of 1957, we were pleased to find a few of these handsome birds located within a half mile of our future homesite. Our property included three acres of woods and two acres of an adjoining field, this field extending for about 500 yards to a large creek. Several long thicket rows traverse the area to the creek.

A multiflora rose hedge was planted on the property lines through the field, and this rapidly attained a height and width of 7 to 8 feet. During the spring of 1959 several White-crowned Sparrows appeared regularly in the hedge but did not approach the house or come to the feeders which were located on the opposite side of the house from the hedge, in the edge of the woods, a distance of approximately 100 yards. In the fall of 1959 these sparrows were first seen on 15 October, and within a month four or five birds were feeding regularly at the ground feeders within 10 to 25 feet of the house. Coarse chick chow and cornbread were used, the birds showing a preference for the latter.

Each winter since 1959 the birds have returned in increasing numbers, the earliest date of arrival being 14 October (1963) and the latest date seen in the spring was 12 May (1964). After the first year they have used the elevated feeders frequently. These consist of one open feeder 4 feet high and two covered feeders 5 feet high.

Peak occurrences seem to come about mid-December and remain at this level until mid-April. White-crowned Sparrows sing all winter but usually do not give the complete song until the latter part of March. Feeding takes place all during the day by six to eight birds at a time, with heavier concentrations in the early morning and late afternoon. They are not shy, feed well with each other, and show neither meekness nor aggressiveness towards other species.

It is interesting that the White-throated Sparrows, of which there were as many or more than White-crowns, approached the house and feeders from a different direction, through the woods, and the two species did not mix often in feeding. When they did happen to do so, there was no dominance of species. Usually the White-crowns returned to the hedge or rested a short while in the shad bushes, water oaks, and sweet gums above the feeding area.

This year (1964), as the flock appeared much larger, I decided to obtain more accurate data through banding. On 26 January my first traps were placed, as I was pleasantly surprised to discover that White-crowns were not trap-shy, as our White-throats are, often feeding calmly after discovering that the trap door was down and becoming frightened only when the trapped bird was approached. Potter type traps were used. From 26 January until 3 May, 97 White-crowned Sparrows were banded. Of these, 89 were banded between 26 January and 25 March before definite plumage change, and of these, 62 (70%) were immature and 27 were adult birds. Of the latter group I did not differentiate subadult and adult. From 25 March, the remaining birds were adult or subadult. I consider the 70% immature a true percentage of the population present. I could see absolutely no difference in the wariness of the immature and mature birds.

Banded birds repeatedly entered the traps, and even though no record was kept of these repeats, an estimate of 100 retraps would be conservative. During this time only 5 White-throated Sparrows were trapped, even though they had equal opportunities for entering the traps.

Two of the White-crowns had large ticks, one located on the throat and the other on the lower eyelid. These were strongly attached and removed with difficulty without tearing the skin. Only one bird had any evidence of injury, this being the absence of two toes on the left foot. Constant observation was made for the possible occurrence of a Gambel's White-crowned Sparrow in the group.

Little plumage change was noticeable until after 25 March. From this date for the next four weeks the immature birds lost most of the brown coloration and became increasingly more grey in the body and wings, in addition to the change in the head markings. Also, more white became noticeable in the wing feathers. By 1 May, the birds that had not started their migration all appeared in the full adult plumage.

It will be interesting to see what recoveries will take place when the White-crowned Sparrows return this fall.—JOHN O. WATKINS, M.D., *P. O. Box 2687, Spartanburg, South Carolina, 17 June 1964.*

Multiple Species Nesting in One Tree.—Nesting by multiple species in a single tree or stub is not particularly uncommon. A glance at our field notes discloses several instances in the Carolina Low Country such as an Eastern Bluebird and a Brown-headed Nuthatch occupying the same small pine stub, their nests, both containing eggs, only 10 inches apart; a Downy Woodpecker and a Tufted Titmouse sharing the same dead limb with nests about 18 feet apart; and the little Blue-gray Gnatcatcher sitting quietly on her nest in an oak tree which also furnished housing for a pair of Parula Warblers.

But it is believed that a new record for compatibility was established this year when five species occupied a 45-foot dead pine stub on the edge of a clearing at Dungannon Plantation near Charleston. Three species nested in the stub at the same time, and two more species nested together later in the spring

On 4 April, a Pileated Woodpecker hole held two eggs, while 9 feet higher a pair of Wood Ducks had laid three eggs in a last year's Pileated Woodpecker cavity. A pair of Red-bellied Woodpeckers began digging their hole near the top of the stub and were incubating on 25 April. Later, on 23 May, a Great Crested Flycatcher had taken over the Wood Duck hole and was incubating. One week later, a Yellow-shafted Flicker had eggs in the nest from which the Pileated Woodpecker young had flown.

The Wood Ducks abandoned their nest, probably because of the proximity of the Pileated Woodpeckers, but the other four species successfully brought off their broods.—ERNEST CUTTS, *1466 South Edgewater Drive, Charleston, South Carolina, 28 June 1964.*

BRIEFS FOR THE FILES

Horned Grebe, 1 in full breeding plumage, 28 March at Murrell's Inlet, S. C., Mrs. Ellison D. Smith. • **Sooty Shearwater**, 1 watched in good light, 30 May, 40 miles SE of Murrell's Inlet sea buoy, Mrs. Ellison D. Smith. • **Magnificent Frigatebird**, 1 immature, 11 June and 1 female, 20 June, over Carolina Beach, N. C., Ronnie Underwood. • **Cattle Egret**, about 10 with a herd of Black Angus cattle near Southport, N. C., 19 June, two birds perched on the backs of cattle, Richard E. Price Jr. • **Wood Ibis**, 2 on 3 July at Wadmalaw Island, S. C., E. B. Chamberlain; 5 on 10 July at Lennon's Marsh, Lumberton, N. C., James Stevens and Richard E. Price Jr. • **Common Merganser**, 1 male, 2 females, 16-18 January, on Lake Johnston, Raleigh, N. C., R. J. Hader and J. F. Parnell.

Bald Eagle, 1 adult and 1 immature, 17 November 1963 at Fairlawn Plantation, Georgetown County, S. C., Jere Eggleston. • **Sparrow Hawk**, 1 on 1 May, Washington, N. C., Geraldine Cox. • **Pectoral Sandpiper**, several, 15 and 16 May in a shallow rain pool, Statesville, N. C., Ronnie Underwood. • **Chuck-will's-widow**, 1 heard 22 May, Winston-Salem, N. C., Royce Hough. • **Whip-poor-will**, nest, 2 eggs, 14 May near Charlotte, N. C., hatched prior to 30 June, Jack Hamilton. • **Western Kingbird**, 1 at feeder a few feet from a window, 12 June, New Bern, N. C., Mr. and Mrs. Fred Conderman. • **Barn Swallow**, 1 nest with young under bridge and more than 2 adults present, 21 May, Clemson, S. C., Mr. and Mrs. Gaston Gage; 2 nests, one with several young 19 June, about 20 adults present, east end Folly Beach, S. C., B. R. Chamberlain; 2 pair feeding young in nest under house, 13 July, 1 pair feeding young under dock, both at Garden City Beach, S. C., 10 July, Mrs. Ellison D. Smith.

Red-breasted Nuthatch, numerous at feeders throughout the winter from 5 October, Effingham, S. C., E. C. Clyde; arrived, Anderson, S. C., 13 October, Mrs. R. C. Tedards; first at Hunting Island, S. C., 19 March, Mrs. R. C. Tedards; more than ever before recorded throughout winter at Fayetteville, N. C., Doris C. Hauser; 2 at Columbia, 24 November, 1 there, 28 November, fairly commonplace thereafter, Mrs. Clyde Sisson. • **Philadelphia Vireo,** 1 at close range, 29 April, Winston-Salem, N. C., Royce Hough. • **Warbling Vireo,** 1 watched well, 19 April at Winston-Salem, N. C., Royce Hough.

Black-and-White Warbler, 1 male feeding in gum swamp, no song heard, Hyde County, N. C., 13 June, J. F. Parnell. • **Prothonotary Warbler,** 1 on 22 April, outskirts of Winston-Salem, N. C., Royce Hough. • **Worm-eating Warbler,** 1 on 12 April, 2 on 15 April, 1 on 18 April, all four netted and banded at Magnolia Gardens, Charleston, S. C., abundant that week in nearby area, T. A. Beckett III. • **Blue-winged Warbler,** 1 on 21 April, Winston-Salem, N. C., Royce Hough. • **Blackpoll Warbler,** 1 found dead within city of Charleston, S. C., 29 April, Elizabeth Simons. • **Wilson's Warbler,** 1 on 18 May, rather late for this transient, watched at close range through a window at Winston-Salem, N. C., Royce Hough.

Rusty Blackbird, 150 in first migrant movement, 6 March, reached maximum of 2,000 on 16 March at North Wilkesboro, N. C., Wendell P. Smith. • **Savannah Sparrow,** a small flock contained an almost entirely white bird probably of that species, 22 February, Morehead City, N. C., John Fussell. • **White-crowned Sparrow,** 1 immature at close range, 10 March, at Clemson, S. C., Mr. and Mrs. Gaston Gage. *All dates 1964 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

BOOK REVIEW

Bird Study in the Mid-South. Will Hon. Tennessee Game and Fish Commission, Nashville, Tenn. 1963. 92 p. Illus. (5 in color). $1.50.

Oh, what I would have given for a book like this the first year I was interested in birds!

Profusely illustrated and informally written, this attractive 8½ x 11 inch paper-bound book provides a brief introduction to bird study suitable for adults and high school students. Most of the illustrations are by the author, but color plates by Jacob Bates Abbott were made available by the Pennsylvania Game Commission. In addition, there are a few drawings by Ned Smith, Charles Schwartz, and Bob Hines. Unfortunately the quality of reproduction does not do justice to Hon's ability as an artist, particularly on page 67 where a well-conceived idea was ruined by an error in the offset camera work.

Starting with fundamentals of attracting birds to home feeders, identifying common species, and making field trips, the author moves quickly into the relationship of birds to their environment. This is his forte. Many experienced birders could profit from reading Hon's discussion of the three life zones, Canadian, Alleghenian, and Carolinian. The book touches many other topics—such as migration, nest construction, physiology, conservation, and banding—just enough to stimulate interest and give the beginner a basic ornithological vocabulary. The book has a few statements which can be termed "over-simplifications," but a certain number of these should be expected in any text written specifically for the uninitiated. To the average beginner, what does it matter whether the Ivory-billed Woodpecker is "extinct" or "virtually extinct"? Unfortunately any species which is virtually extinct one year is very likely to be actually extinct the next. Discussion of a point such as this should not be allowed to detract from a book of great value to beginning bird students.

Two features would enhance the usefulness of *Bird Study in the Mid-South,* an index and a list of publications recommended for further reading. The need for an index is self-evident in any book as full of facts as this one. The suggested reading list is merely a logical conclusion for a book which does an excellent job of preparing even the most inexperienced person for thoughtful bird study.—ELOISE F. POTTER

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Duane, Mrs. John P., Hilton Head, S. C.
Earle, Mrs. Sam, 428 Causeway Drive, Wilmington, N. C.
Falley, Mrs. R. M., 1428-C, Hwy 7, Charleston S. C. 29407
Farmer, W. Humphreys, 1117 Green Acres, Anderson, S. C.
Faver, Mrs. Annie Rivers, Beaumont, Eastover, S. C. 29044
Faver, W. H., Eastover, S. C.
Field, Mrs. F. E., 32 Buena Vista Road, Biltmore Branch, Asheville, N. C.
Fries, Waldemar H., 86 Cushing St., Providence, R. I. 02906
Gage, Dr. Lucius G., Jr., 1350 S. Kings Drive, Charlotte, N. C. 28207
Gardner, Mrs. M. D., MOQ 2712, Camp Lejeune, N. C.
Green, Mrs. Charlotte Hilton, 3320 White Oak Road, Raleigh, N. C.
Gibson, Mrs. Nelson, Box 52, Gibson, N. C. 28343
Hampton, H. R. E., Route 4, Woodlands, Columbia, S. C.
Hanes, Mrs. P. Huber, Jr., 525 N. Hawthorne Road, Winston-Salem, N. C.
Hanke, Mr. & Mrs. Edward, 1008 Peach Street, Tarboro, N. C.
Harper, Miss Margaret, (Box 673), 101 Kirkwood Ave., Lenoir, N. C.
Hendren, Linville L., Box 148, Elkin, N. C. 28621
Hendrix, Mrs. P. B., Woodberry Road, Route 1, Lexington, S. C.
Hobbs, Miss Sara Ann, 813 Ravenwood Drive, Raleigh, N. C.
Hodel, Earl M., 137 Westover Drive, Elkin, N. C. 28621
Holoman, Mrs. Dallas, Jr., 3033 Rothgeb Drive, Raleigh, N. C.
Hoskins, Dr. Frank L., Newberry College, Newberry, S. C.
Hostetler, Mrs. Ivan, 2604 Van Dyke Ave., Raleigh, N. C.
Howell, Miss Thelma, Highlands Biological Station, Highlands, N. C.

Hudson, Mr. & Mrs. J. E., 540 Eleventh Ave., Circ. N. W., Hickory, N. C.
Ingram, J. T., 330 S. Mulberry St., Lenoir, N. C.
Jarvis, P. O., Box 627, New Bern, N. C.
Jeffreys, Mrs. Ernest, Fremont, N. C.
Jenkinson, Miss Mary C., Box 715, Bryson City, N. C.
Johnson, Mrs. Harry L., 138 Edgedale Dr., Elkin, N. C.
Jones, Miss Mabel M., 2410 Dix Street, Raleigh, N. C.
Jones, Dr. Thomas T., 904 Broad St., Durham, N. C. 27707
Joyner, J. W. E., 1504 Pinecrest Rd., Rocky Mount, N. C.
Kelly, Alfred W. B., 2177 Lincoln Ave., Apt. 12A, Montreal 25, Quebec, Canada
Lacoss Mrs. Donald A., 1454 Alexander Road, Rock Hill, S. C.
Latimer, H. G., Jr., 2244 Mimosa Place, Wilmington, N. C.
Lundy, Prof. T. E., ECC, Box 2577, Greenville, N. C.
McAlister, Lacy L., 706 N. Queen St., Greensboro, N. C. 27401
McCoy, Mrs. Robert, 2014 Hamilton Road, Greensboro, N. C.
McGee, Mr. & Mrs. Hall T., 38 Barre St., Charleston 37, S. C.
McLaurin, Mrs. James L., Route 1, Bath, N. C.
McLean, Dr. & Mrs. David C., 550 Wisteria Drive, Florence, S. C.
Manigault, Peter, The Charleston Evening Post, Charleston, S. C.
Massey, Dr. Zyba, Box 252, Zebulon, N. C.
May, Fred H., 211 Beall St., Lenoir, N. C.
Medford, H. L., 830 Cornwallis Rd., Greensboro, N. C.
Melsheimer, Mrs. L. A., 117 N. Race St., Statesville, N. C.
Mills, Dudley H., 19 Pound Hollow Rd., Glen Head, N. Y.
Moore, Mrs. H. Lan, P. O. Box 907, Tryon, N. C. 28782
Moore, Mrs. Yancey, P. O. Box 243, Gastonia, N. C.
Nichols, Miss Margaret, Route 1, Box 212, Star, N. C.
Norwood, Mr. & Mrs. Joseph R., Jr., 1329 Goodwin Ave., Charlotte 5, N. C.
Oates, Mrs. John A., 406 St. James Square, Fayetteville, N. C.
Oettinger, Mrs. Edwin, Harvey Circle, Kinston, N. C.
Olson, Mrs. Earl, 120 W. Norris Road, Norris, Tenn.
Outland, Mrs. Robert B., Box 98, Rich Square, N. C.
Peeler, Mr. & Mrs. Shuford K., 1400 Woodland Drive, Charlotte, N. C.
Patrick, Mrs. Paula M., 637 Oakwood Lane, Rock Hill, S. C.
Phelps, Mrs. Elizabeth, Phelps Industries, Skyland, N. C.
Pollock, Capt. Adrian Q., 2031 McGregor Blvd., Fort Myers, Fla.
Potter, Mrs. G. C., 2111 Malvern Road, Charlotte, N. C.
Rankin, H. A., Jr., Box 803, Fayetteville, N. C.
Rhodes, Dr. and Mrs. John S., Route 6, Box 204C, Leesville Road, Raleigh, N. C.
Royal, Dr. Ben F., 900 Shepard St., Morehead City, N. C.
Rupp, Dr. R. E., 2519 Tanglewood Lane, Charlotte 7, N. C. 28211
Sample, Fred, 6740 Cary Lane, Columbia, S. C.
Sandburg, Miss Janet, Connemara Farm, Flat Rock, N. C.
Shuler, James B., Jr., 43 Kirkwood Lane, Greenville, S. C.
Simpson, Dr. & Mrs. Thomas W., 763 Barnesdale Road, Winston-Salem, N. C.
Simpson, Mr. & Mrs. William B., 1610 Thorncliffe Drive, Winston-Salem, N. C.
Sisson, Mr. & Mrs. Clyde, 1617 Tanglewood Road, Columbia 7, S. C.
Smith, Mrs. Ellison D., Jr., 1626 Shady Lane, Columbia, S. C.
Sprunt, Laurence G., P. O. Box 3625, Wilmington, N. C.
Staats, Robert, Route 1, Jervey Road, Tryon, N. C.
Stone, Mrs. W. Cornwell, Sr., 146 West End, Chester, S. C.
Street, Thomas E., Weather Bureau, Box 8146, Greensboro, N. C.
Taylor, Dr. E. H. E., Broadoaks Sanatorium, Drawer 1139, Morganton, N. C.
Tedards, Mrs. Adair M., Route 2, Brown Road, Anderson, S. C.
Tillinghast, Edward S., Box 488, Greenville, S. C. 29602
Van-Duzer, Miss Edith, Meeks Road, Ridgecrest, N. C.
Wachenfeld, Mrs. Anne, 787 E. Clark Place, Orange, N. J.
Walker, Mrs. John N., Box 166, Mount Olive, N. C.
Walker, Miss M. Missouri, Route 1, Box 290, Blackville, S. C. 29817
Wall, Mrs. Margaret Y., 5 Springdale Court, Greensboro, N. C.
Watkins, John Overbey, Box 2687, Spartanburg, S. C.
Watson, Richard F., Jr., 113 James St., Greenville, S. C.
Willis, Mr. & Mrs. Ben, 916 Kenleigh Circle, Winston-Salem, N. C.
Wilson, Mrs. Paul, 217 Sumter Ave., Summerville, S. C.
Wilson, Mrs. Roger, Box 1277 (Country Club Road), Gastonia, N. C.
Wilson, Mrs. Thomas B., 3328 White Oak Road, Raleigh, N. C.
Witte, Mrs. Hattie S., 1814 Green St., Columbia, S. C.
Wright, Miss Katherine, P. O. Box 21, Sumter, S. C.
Yocom, Miss Frances, 516 East Franklin St., Chapel Hill, N. C.

FAMILY MEMBERSHIPS

Anderson, A. V., Jr., Box 1468, Raleigh, N. C.
Anderson, Mrs. Hallie, P. O. Box 177, Timmonsville, S. C.
Andrew, Dr. & Mrs. John M., Box 524, Lexington, N. C.
Appleberry, Mr. & Mrs. C. M., 2160 Herschel St., Apt. 3, Jacksonville 4, Florida
Ball, George W. & Dorothy R., Box 386, Morehead City, N. C.
Barkelow, Dr. Fred S., Jr., 3439 Bradley Place, Raleigh, N. C. 27607
Beck, Mr. & Mrs. William T., 6047 Gillcreek Rd., Columbia, S. C.
Blake, Dr. & Mrs. Charles H., P. O. Box 613, Hillsboro, N. C.
Bostian, Dr. C. H., 1000 Lake Boone Trail, Raleigh, N. C.
Brown, Gordon H., Box 216, Columbia, S. C.
Bryan, Charles I., Route 1, Box 377, Raleigh, N. C.
Bryan, Thomas R., 218 Surry Ave., Elkin, N. C.
Burns, Mrs. G. L., Athens-Walnut Hill Pike, Route 5, Lexington, Kentucky

Carmichael, Mrs. Wm. D., Jr., Chapel Hill, N. C.
Carney, Mrs. James M., Springside, Glenville, N. C.
Cecil, Mr. & Mrs. Richard F., Box 2156, Station A., Spartanburg, S. C.
Clinard, J. Weston, 563 Ninth St., N. W., Hickory, N. C.
Cluff, Mr. & Mrs. George W., 5020 Michigan Ave., Camp Lejeune, N. C.
Coffey, Mr. & Mrs. W. H., 215 Hillside Ave., Charlotte 9, N. C.
Coleman, Mrs. Stephanie Moore, Box 404, Lake Junaluska, N. C.
Comstock, Mr. & Mrs. Rock L., Jr., 508 N. Pinetta Dr., Bon Air, Va. 23235
Cowan, Mrs. B. D., 1909 Spring Lane, Camden, S. C.
Cox, Mr. & Mrs. David, Jr., Hertford, N. C.
Craft, William Hugh, 1000 Dover Road, Greensboro, N. C. 27408
Cronquist, Mrs. N. R., Route 3 Sherwood Circle, Gastonia, N. C.
Cuyler, Dr. & Mrs. W. Kenneth, Route 1, Box 52, Durham, N. C.
Davis, John P., M.D., 329 Banbury Road, Winston-Salem, N. C.
Dehan, Arthur M., Sherwood Forest, Audubon Colony, Cedar Mountain, N. C.
Dickens, Mr. & Mrs. L. A., Box 189, Dillon, S. C.
Drewry, Mrs. John C., Route 3, Turtle Hill, Wilmington, N. C.
Duncan, W. G., 519 Ridgewood Road, Louisville 7, Ky.
Eddy, Mrs. Clyde, 25 Woodcrest Road, Asheville, N. C.
Edwards, Dr. & Mrs. Edgar, 123 Penny Road, High Point, N. C. 27260
Fenninger, Mrs. Randolph, 455 Sumter St., S. E., Aiken, S. C.
Frazier, Mrs. J. B., Jr., 700 M. Ave., Box 243, West Columbia, S. C.
Gabrielson, Dr. Ira W., Route 1, Box 349, Oakton, Va.
Gage, Mr. & Mrs. Chas. V., 1400 Lyndhurst St., Gastonia, N. C.
Gage, Mr. & Mrs. Gaston, 305 Edgewood Ave., Clemson, S. C.
George, Rev. & Mrs. L. B., Lake Junaluska, N. C.
Gokay, Mr. & Mrs. Aden, Canaan, N. Y. 12029
Grimes, Mr. & Mrs. G. Junius, Box 7, Washington, N. C.
Hamilton, John P., 6341 Sharon Hills Road, Charlotte, N. C. 28210
Harris, Fred M., 187 Victoria St., Elkin, N. C.
Heath, Mr. & Mrs. Clifford, 208 Country Club Dr., New Bern, N. C.
Heins, E. C., Jr., 410 Gulf St., Sanford, N. C.
Hull, Alexander, 928 Lambeth Circle, Durham, N. C.
Jameson, Mrs. A. L., 102 Woodlawn Drive, Williamston, N. C.
John, Mrs. J. Thomas, 415 West Blvd., Laurinburg, N. C.
Johnson, Dr. & Mrs. B. McK., Box 94, Wallace, N. C.
Jones, Mr. & Mrs. J. Eugene, Jr., 1209 E. Sandhurst Dr., Florence, S. C., 29501
Jones, J. Haywood, Trent Woods Drive, New Bern, N. C.
Jones, Dr. Thomas J., 1015 Anderson St., Durham, N. C.
Justice, Dr. William S., 14 White Oak Road, Biltmore Forest, Asheville, N. C.
Kappes, Mr. & Mrs. W. Raymond, 141 Grady St., Tryon, N. C.
King, Mrs. Frances L., 423 Park Boulevard, Winston-Salem, N. C.
King, Mrs. Pinkney, 1719 Home Ave., Hartsville, S. C.
Klenner, Mrs. Fred R., Box 840, Reidsville, N. C.
Klugh, Mr. Arthur M., Jr., 1909 N. Main St., Anderson, S. C.
Koepp-Baker, Dr. H., 1210 W. College St., Carbondale, Ill. 62901
Langford, Mr. & Mrs. Ralph W., 410 Woodlawn, Gastonia, N. C.
Lawrence, Mr. & Mrs. W. Henry, Route 1, Sea Oak Lane, Hilton Head, S. C.
Lennon, Mrs. R. S., Box 301, Kings Mountain, N. C.
Lewis, Dr. & Mrs. O. P., W. Mountain St., Kings Mountain, N. C.
Lohr, Mr. & Mrs. Ivey W., 407 West Center St., Lexington, N. C.
Lovell, Jim, 5001 Erickson, Charlotte, N. C.
Lovin, Charles E., Jr., 2523 Woodlyn Way, Greensboro, N. C. 27407
Lybrand, Mr. & Mrs. Harvie, Ocean Villa, Edisto Beach, S. C.
McCandlish, Mrs. Howard S., 311 W. Godbold St., Marion, S. C.
MacCarthy, Dr. G. R., 107 Ledge Lane, Chapel Hill, N. C.
McGuckin, B. F., 43 Tradd St., (Box 204), Charleston, S. C.
McIver, Mrs. E. G., No. 15, Beverly Drive, Durham, N. C.
McMaster, Mr. & Mrs. Edward A., 311 N. Congress St., Winnsboro, S. C.
Mahy, G. Gordon, Warren Wilson College, Swannanoa, N. C.
Marrow, Mr. E. H., Jr., 210 Cromwell Ave., Tarboro, N. C. 27886
Meadows, J. A., 1110 Green Spring Rd., New Bern, N. C.
Metcalf, Col. & Mrs. I. S. H., Box 67, The Citadel, Charleston, S. C. 29409
Miller, Mrs. C. W., 112 E. Ash St., Goldsboro, N. C. 27530
Mooney, Mrs. Barbara L., Dept. of Botany, Univ. of Calif., 405 Hilgard Ave., Los Angeles 24, Calif.
Mott, Thomas A., 507 Second Ave., N. W., Hickory, N. C.
Neely, A. W., Waynesboro, Ga.
Norwood, Thomas H., 600 S. Oleander Ave., Goldsboro, N. C. 27530
Otte, Frank R., Box 282, Whittier, N. C.
Orr, Harry A., McDaniel Heights, Apt. 11-D, Greenville, S. C.
Peacock, Mrs. M. B., 200 Highland Road, Fairfax, Va.
Pickett, Oscar A., Erwin Rd., Route 1, Durham, N. C.
Potter, Mr. & Mrs. James M., Jr., P. O. Box 487, Zebulon, N. C.
Powers, Mrs. Etheridge, 3415 Hope Valley Road, Durham, N. C. 27707
Quay, T. L., 2608 Barmettler St., Raleigh, N. C.
Reese, Mrs. Garland W., Box 158, Tryon, N. C.
Robinson, Mrs. Hoke, 5027 Wittering Drive, Columbia, S. C.
Roberts, Harold R., RFD #1, Jones Ferry Rd., Chapel Hill, N. C.
Rogers, Dr. Helen, 1124 Elizabeth Drive, Laurinburg, N. C.
Rose, Alex, 860 Myrtle Drive, Rock Hill, S. C.
Sayward, W. S., 2401 Vernon Drive, Charlotte 7, N. C.
Schiele, R. W., Box 966, Gastonia, N. C.
Sears, Mrs. C. B., 406 N. Thompson St., Whiteville, N. C.

Shepard, D. C., Jr., Laurel Hill Road, Chapel Hill, N. C.
Shepherd, Mrs. W. S., Box 1089, Lumberton, N. C.
Shuler, Mrs. E. L., 212 Frank Street, Westminster, S. C.
Skelton, Alex, Rt. 1, Little Creek Road, Anderson, S. C.
Smith, Mrs. George A., 211 E. Avondale, Greensboro, N. C.
Smith, Miss Helen P., 519 E. Main St., Spartanburg, S. C.
Smith, J. Gilbert, Robersonville, N. C.
Smith, Mrs. Paul C., Gillette Woods, 697, Tryon, N. C. 28782
Smith, Robt. F., 206 W. James St., Mount Olive, N. C.
Smith, Starling L., Rt. 5, Paris Mt., Greenville, S. C.
Smith, W. M., 2036 E. Seventh St., Charlotte 4, N. C.
Speight, E. Carr, 333 S. Tillery St., Rocky Mount, N. C.
Stewart, Mrs. Ruth A., Box 517, Southern Pines, N. C.
Teulings, Mr. & Mrs. Robert P., Route 2, Chapel Hill, N. C.
Thawley, Leonard H., Route 1, Box 304, Tryon, N. C. 28782
Travis, Henry F., Route 4, Box 976, Hickory, N. C. 28601
Trott, L. John, Jr., 1217 Stafford Rd. Alexandria, Va. 78387
Turnbull, John R., 2823 Canterbury Rd., Columbia, S. C.
Williams, Mrs. Chester B., 1400 Raeford Rd., Fayetteville, N. C.
Williams, John M., Route 5, Box 104, Hendersonville, N. C.
Wilson, T. V., Drawer 127, Bethune, S. C.
Winkler, Edwin W., 509 Gardner St., Raleigh, N. C.
Woods, Auburn, Box 606, Hartsville, S. C.
Walters, Mrs. Harold, 714 Greenwood Rd., Chapel Hill, N. C.

REGULAR MEMBERS

Adams, Elizabeth, Route 2, Hodges, S. C. 29653
Adams, Philip W., 1341 Sanford Road, Columbia, S. C.
Addis, Mrs. Edward, 208 Hillside Court, Tryon, N. C. 28782
Aldred, Mrs. Joseph, Box 1046, Tryon, N. C. 28782
Alexander, Mrs. S. L., Box 32, Wrightsville Beach, N. C.
Allen, Mr. and Mrs. A. T., 143 West End, Chester, S. C.
Allen, Miss Neita, 146 Belle Street, Henderson, N. C.
Allen, Mrs. Paul, 2100 Boswell Ave., Charlotte, N. C.
Alsager, Miss Marie, Box 1424, Tryon, N. C. 28782
Alston, Miss Edith, 43 Prospect Parkway, Portsmouth, Virginia
Altheon, Henry, 319 Third Street, Dunellen, N. J.
Althouse, Rev. H. D., 535 Second Ave., N. W., Hickory, N. C. 28601
Ames, J. E., Jr., Driver, Va.
Anderson, C. E., 3008 Convent Road, Columbia, S. C.
Anderson, Dr. Norman L., 86 Victoria Road, Asheville, N. C.
Anderson, William L., Jr., Route 1, Box 201, Matthews, N. C. 28105
Andrews, Mr. and Mrs. G. C., 102 Park Ave., Kinston, N. C.
Armstead, Henry T., 7720 McCallum Street, Philadelphia, Pa. 19118
Armstrong, Mr. and Mrs. Emerson, 120 Country Club Heights, Tryon, N. C. 28782
Askew, Mr. and Mrs. Earl A., P. O. Box 24, Rich Square, N. C.
Atwood, Mrs. Paul, Edisto Island, S. C. (Box 32) 29438
Austin, Mr. and Mrs. James H., 118 Newman St., Greenville, S. C.
Austin, John W., Jr., 500 Lindale Drive, High Point, N. C.
Austin, Johnny, 500 Lindale Drive, High Point, N. C.
Austin, Mrs. Mary C., 11 East Aveune, Greenville, S. C.
Austin, Miss Pat, 687 Probart Street, Brevard, N. C.
Austin, Mrs. W. B., Jefferson, N. C.
Avant, Mrs. P. K., 218 N. Franklin Street, Whiteville, N. C.
Avery, Mrs. L. T., Box 1278, Southern Pines, N. C.

Bachman, A. W., Jr., 8540 Elm Road, Richmond 35, Va.
Bachman, A. W., Sr., 111 Jennette Ave., Henderson, N. C.
Bahler, Mrs. A. L., Box 458, Tryon, N. C. 28782
Bailey, Joseph R., Dept. of Zoology, Duke University, Durham, N. C.
Baker, Gladys, Rt. 3, Zebulon, N. C.
Baldwin, Mrs. L. W., 4354 McGirts Blvd., Jacksonville 10, Fla.
Ballard, Dr. Charles E., Pickens Co. Health Dept., Pickens, S. C.
Banzet, Julius, Warrenton, N. C.
Barber, Genevieve, 828 Hartford Ave., Charlotte 9, N. C. 28209
Barber, J. D., 2600 Burney Drive, Columbia, S. C.
Barber, Miss Lunette, Rt. 1, Clayton, N. C.
Barkley, Mrs. Ethel S., 619 E. Main St., Washington, N. C.
Barnes, David, Box 672, Chapel Hill, N. C.
Barnhall, M. V., III, Stanford Physics Dept., Stanford, Calif. 94305
Barrington, Mr. & Mrs. Francis, 313 Stono Drive, Riverland Terrace, Charleston 43, S. C.
Barrow, Miss Elva, 329 McIver St., Greensboro, N. C.
Bartholomai, C. W., 3148 Lenox Road, N.E., Atlanta, Georgia 30324
Bass, Mrs. Dean, 207 S. Eastern St., Greenville, N. C.
Batchelor, Marvin, Route 7, Raleigh, N. C.
Bates, Mrs. W., Oak Hall Hotel, Tryon, N. C. 28782
Baum, Mrs. Paul, 112 Pinecrest Road, Durham, N. C.
Ball, Miss Elizabeth, Box 155, Live Oak, Florida
Belknap, Mr. & Mrs. Paul A., 515 Parkside Dr., N. Charleston, S. C. 29406
Bell, Miss Faith, Little Switzerland, N. C.
Bell, Frank, Mondamin, Tuxedo, N. C. 28784
Bell, Mrs. John C., Deer Brook Farm, Route 4, Inman, S. C.
Bell, Mrs. Roland V., Route 1, Lodge, S. C.
Benson, Mrs. John, 710 Gatewood Ave., High Point, N. C.
Bernard, Mrs. J. B., 301 Beall St., Lenoir, N. C.
Bernhardt, Miss Isabel, 4 Bernhardt Circle, Lenoir, N. C.
Bertling, Mrs. M. H., 2312 Princess Anne St., Greensboro, N. C.

Beymer, Miss Flora, 255 Elford Terrace, Spartanburg, S. C.
Billica, Mrs. Harry R., 216 Pineview Drive, Greenville, N. C. 27834
Black, Miss Dorothy, School St., Tryon, N. C. 28782
Black, Mrs. Gladys B., 608 DeWitt, Pleasantville, Iowa 50225
Bodell, Mrs. Henry R., 3819 Abingdon Rd., Charlotte, N. C. 28211
Boehm, M. A., RFD 1, Haw River, N. C.
Bonin, Mrs. W. L., 2731 Pilgrim Court, Winston-Salem, N. C. 27462
Booth, Mrs. Douglas, 2119 Sharon Rd., Charlotte, N. C. 28207
Booth, Mrs. Roy R., 300 Kimberly Ave., Asheville, N. C.
Bowers, Mr. & Mrs. J. Lester, Fuller St., Whiteville, N. C.
Braddy, Mrs. R. A., E. Main Street, Dillon, S. C.
Branch, W. H., Green Heron Rd., Hilton Head Island, S. C.
Bridges, Mrs. E. C., Box 138, Heath Springs, S. C.
Bright, Mrs. DeWitt, 704 N. Franklin St., Whiteville, N. C.
Brintnall, Mrs. A. W., Box 716, Seven Hearths, Tryon, N. C. 28782
Brinton, Mrs. C. H., 1910 Haywood Road, Hendersonville, N. C.
Britton, Mrs. James, P. O. Box 1803, Myrtle Beach, S. C.
Brooks, Miss Barbara, 301 Louise Ave., High Point, N. C.
Brown, Mrs. Bertie S., 714 Monroe St., Roanoke Rapids, N. C. 27870
Brown, Gary, Route 1, Mooresville, N. C.
Brown, Mrs. O. J., & Family, 314 Mitchell St., Salisbury, N. C.
Brown, Mrs. V. Jordan, 7 Westwood Road, Biltmore Forest, Asheville, N. C.
Browne, Mike, 2728 Cambridge Road, Raleigh, N. C.
Browning, Ralph, B 253, Phoenix, Oregon
Bruner, Mr. & Mrs. Murray, P. O. Box 655, Lenoir, N. C.
Bryan, Mrs. Cyril K., Box 274, Kimberton, Pa.
Bryan, Mrs. W. Carroll, 210 Woodland Drive, Jacksonville, N. C.
Buckner, Miss Gladys, 500 West Ave., N. Augusta, S. C.
Buckner, Miss Mercedes, 500 West Ave., N. Augusta, S. C.
Bumgarner, Mrs. Howard, Rt. 7, Morganton, N. C.
Burchfield, Mrs. R., 509 Gaymot Street, Staunton, Va.
Burgess, Miss K., 2203 Melrose Circle, Tryon, N. C. 28782
Burham, Mrs. H. H., 150 St. Clair Ave., W, Apt. 204, Toronto, Ontario, Canada
Burkett, Miss Lillian, P. O. Box 666, Sumter, S. C.
Burkett, Miss Louise E., Box 666, Sumter, S. C.
Burnett, Mrs. Oscar W., 1910 Lafayette Ave., Greensboro, N. C.
Burroughs, Miss Annie Gray, 215 Young Ave., Henderson, N. C.
Butler, Mr. & Mrs. W. Lawrence, 1312 Valmont Drive, Hendersonville, N. C.
Buxton, Mrs. J. T., 26 Frank Clarke St., Cricket Hill, Sumter, S. C.
Byerly, Miss Anne, 218 W. Ray St., High Point, N. C.
Byerly, Miss Wilma, 218 W. Ray St., High Point, N. C.

Cabell, Mr. R., 810 Swann St., Parkersburg, W. Va.
Cahoon, Willie Gray, New Holland, N. C.
Caldwell, Mrs. J. S., 133 York St., Chester, S. C.
Calhoun, Miss Catherine T., Lake Junaluska, N. C.
Cannon, Miss Marjorie, 701 Henry St., Roanoke Rapids, N. C.
Cannon, Miss Sara, 536 Hamilton St., Coltrane Hall, Roanoke Rapids, N. C.
Cannon, Mrs. Stuart, P. O. Box 550, Hartsville, S. C.
Cantey, Dr. & Mrs. S. O., Jr., Willcox Ave., Marion, S. C.
Carlson, Carl W., 5706 Lone Oak Dr., Bethesda, Md.
Carr, Mrs. E. E., Box 9067, Oteen Br., Asheville, N. C.
Carr, John W., Box 411, Hillsboro, N. C.
Carraway, Mrs. Bruce, 305 Hillcrest Drive, High Point, N. C.
Carroll, Mr. & Mrs. Latrobe, 349 Country Club Road, Asheville, N. C.
Carson, J. H., 1727 Queens Road West, Charlotte 7, N. C.
Carter, Mrs. B. Clyde, 148 Saluda St., Chester, S. C.
Carter, Bert, 215 Forest Hall Ave., Rocky Mount, N. C.
Carter, Miss Bettie Jane, Laurel Springs, N. C.
Carter, Mrs. D. Wade, 1101 McDowell St., Greensboro, N. C.
Carter, Derb, Jr., 417 Devane Ext., Fayetteville, N. C.
Carter, Jay, P. O. Box 891, Southern Pines, N. C.
Carter, Miss Ruth, 717 N. William St., Henderson, N. C.
Cartland, Mrs. Madge, 226 W. Ray St., High Point, N. C.
Cartwright, Aulbert, Rt. 1, Box 188A, Bath, N. C.
Case, Lt. Col. Chas. E., 128 Swathmore Ave., Belvedere, S. C.
Cash, Eleanor, 1907 S. Miami Blvd., Durham, N. C.
Cason, Mrs. David A., Jr., Route 6, Box 229, Greensboro, N. C.
Cathey, Mrs. George, Box 478, Tryon, N. C.
Catlett, Mrs. Albert W., 1030 Marys Drive, Tallahassee, Fla.
Chalfant, Mrs. J. W., 3135 Sussex Road, Raleigh, N. C.
Chamberlain, Mrs. B. R., Wadmalaw Island, S. C.
Chamberlain, E. B., P. O. Box 3039, St. Andrews Branch, Charleston, S. C. 29407
Chamberlain, Mrs. Rollin, Box 1251, Tryon, N. C.
Chamblee, Fred, Rt. 2, Box 375, Asheville, N. C. 28805
Chamblee, Dr. H. Royster, 1127 Harvey St., Raleigh, N. C.
Charlton, Mrs. Olga, 1806 White Oak Road, Raleigh, N. C.
Chavasse, Miss Mary Frances, 225 Orange Street, Henderson, N. C.
Cheeks, Mrs. Chas. C., 505 Hawkins Ave., Sanford, N. C.
Cilley, Donald A., 2905 Hostetler St., Raleigh, N. C.
Clark, Miss Betty, Box 385, Mt. Pleasant, N. C.
Clark, Mrs. Joel A., 302 Country Club Dr., New Bern, N. C.
Clark, Mrs. J. Rhett, 2719 Preston St., Columbia, S. C.
Clark, Miss M. L., 1331 Highland Ave., Auguta, Georgia
Clark, Walter, 209 Rockingham Road, Greenville, S. C.

Clary, Grace, 102 N. Johnston St., Gaffney, S. C.
Clay, Mrs. Emily T., 939 Milledge Road, Augusta, Georgia
Clyde, E. C., Jr., Effingham, S. C.
Cole, Miss Margaret Evelyn, Murray State College, 1703 Ryon Ave., Murray, Ky.
Coleman, Miss Jo Ann, Box 127, SBTS, 2825 Lexington Rd., Louisville, Ky. 40206
Coleman, Mrs. Dorothy M., Box 126, Ridgeway, S. C.
Coleman, Mrs. Robert Hemphill, 1299 Old Town Road, Charleston, S. C.
Colvin, Miss Mayme, 148 West End, Chester, S. C. 29906
Comeau, Clifford M., 7216 Flower Ave., Apt. 8, Takoma Park, Md. 20012
Comstock, Harold R., 3010 Overlook Rd., Cuyahuga Falls, Ohio
Conderman, Mr. & Mrs. F. D., Box 211, Route 3, New Bern, N. C.
Connell, Miss Jane C., Box 617, Warrenton, N. C.
Connelly, Allen, Route 3, New Bern, N. C.
Conover, Mr. & Mrs. H. L., Box 234, Murrells Inlet, S. C.
Cook, George A., 406 E. 8th Street, Greenville, N. C. 27834
Cooke, M. Alma, Box 276, Butler, Georgia
Cooley, Mrs. Samuel S., Box 745, Black Mountain, N. C.
Copeland, Dr. J. D., 353 Mills Ave., Spartanburg, S. C.
Councilman, Mrs. R. L., 122 Glenwood Ave., Burlington, N. C.
Courtney, Mrs. J. E., 229 Hillside Ave., Fayetteville, N. C.
Councell, Mrs. Charles, Lakeview Circle, Clemson, S. C.
Council, Mrs. K. Clyde, 402 N. Franklin St., Whiteville, N. C.
Covington, Mr. & Mrs. L. B., P. O. Box 455, Darlington, S. C.
Craft, Mrs. Floyd H., 1219 Buckingham Road, Greensboro, N. C.
Craig, Miss Doris, 827C Daniels St., Raleigh, N. C. 27605
Craig, Mrs. Vernon, Rt. 2, Box 163-A, Valdese, N. C.
Craven, William, 1710 Park Drive, Raleigh, N. C.
Crawford, Mr. & Mrs. Robt. T., 702 W. Union St., Morganton, N. C.
Crayton, Mrs. P. C., Box 1601, Anderson, S. C.
Crick, Miss Ruth, 151 N. Fairview Ave., Spartanburg, S. C.
Crockford, Mrs. H. D., 305 Country Club Rd., Chapel Hill, N. C. 27514
Crofts, Mr. & Mrs. T. J., 111 Jervey Road, Rt. 1, Tryon, N. C. 28782
Crook, Miss Barrett, Route 2, Box 54, New London, N. C.
Crosby, Paul E., 751 Palmetto St., Spartanburg, S. C.
Culbreth, Kelly, 2403 Cypress Ave., Greensboro, N. C.
Culler, Miss Emily, 345 Glover St., S. E., Orangeburg, S. C.
Culler, E. E., Jr., 3630 Verner St., Columbia, S. C.
Currin, Miss Gladys, State School for the Blind, Raleigh, N. C.
Cutts, Ernest, 1466 S. Edgewater Drive, Charleston, S. C.

Daniel, James A., Box 491, Mocksville, N. C.
Daniel, Miss Omara, 536 Hamilton St., Coltrane Hall, Roanoke Rapids, N. C.
Daniel, Mrs. W. B., Jr., Box 295, Oxford Road, Henderson, N. C.
Darrin, Mrs. Erwin N., 864 Glendalyn Ave., Spartanburg, S. C.
Davenport, Mrs. Allen G., 39 Walcott Ave, Jamestown, Rhode Island
Davis, Mr. & Mrs. A. J., Jr., 607 N. Church St., Mount Olive, N. C.
Davis, Mrs. Douglas J., Box 244, Elm City, N. C.
Davis, Ferd, Zebulon, N. C.
Davis, Mrs. H. L., 1744 Hillcrest Blvd., Spartanburg, S. C.
Davis, Mrs. M. A., 121 Terpley St., Burlington, N. C.
Davis, Mrs. R. G. S., 230 Andrews Ave., B 199, Henderson, N. C.
Davis, Sam, Jr., Route 2, Box 3, Hayesville, N. C.
Davison, Miss Zeta C., Presbyterian Manse, Pilot Mountain, N. C.
Dawson, Mrs. Horace, 205 Melrose Circle, Tryon, N. C. 28782
Deaver, Miss Nell L., 2723 Brown Ave., Apt. 21 E, Durham, N. C.
DeLamater, Mrs. B. E., Sr., 1707 Crestview Drive, Springfield, Ohio 45504
DeLamater, Mrs. B. E., Jr., 213 Cedar Drive, Riegelwood, N. C.
Denton, Dr. J. Fred, 1510 Pendleton Road, Augusta, Georgia
Depoe, Charles E., 100 Curve Drive, Monroe, La.
Dermid, Jack F., 218 Brightwood Road, Wilmington, N. C.
DeVisconti, Miss Tabitha, Box 263, Farmville, N. C.
Dillehay, Mrs. Harold, 1632 Hertford Road, Charlotte, N. C. 28207
Dishman, Miss Martha, Route 1, Box 136, Mooresville, N. C.
Dixon, Mrs. Charles W., Box 237, Elm City, N. C.
Dobbs, Mrs. James K., 1751 Flagler Ave., NE, Atlanta, Georgia 30309
Doscher, Mrs. Lois T., 6 Murphy Court, Charleston, S. C.
Douglas, Miss Clemintine, 1092 Hendersonville Rd., Asheville, N. C.
Douglas, Mrs. R. D., 512 Cornwallis Drive, Greensboro, N. C.
Downer, Dr. & Mrs. C. T., B 1441, Tryon, N. C. 28782
Draper, Mrs. H. D., Jr., 3717 Parkwood Dr., Greensboro, N. C.
DuBois, Miss Charlotte, Greensboro Junior Museum, Greensboro Country Park, Greensboro, N. C.
DuBose, Mrs. D. S., 315 Cashua St., Darlington, S. C.
Duchein, Annette, Spartan Mills, Box 431, Spartanburg, S. C.
Duehring, Victor W., 4216 28th St., Apt. 4, Mt. Rainier, Md.
Dunbar, Mrs. Paul Allen, 6 Sylvan Drive, Spartanburg, S. C.
Dunlop, Mrs. Harrison, 59 Edgemont Road, Asheville, N. C.
Dye, William T., Jr., 604 Laurel Hill Rd., Chapel Hill, N. C.
Dykema, Adrian H., 4733 Walden Court, Charlotte, N. C. 28210
Dysart, Mrs. S. D., 107 Terrace Place, Morganton, N. C.

Eaton, Miss Mossa, Route 5 (Cana), Mocksville, N. C.
Eckman, Mr. & Mrs. Phil, 120 Rosedale Valley Rd., Apt. 402, Toronto 5, Ontario, Canada
Edwards, Mrs. James, 905 Johnson St., High Point, N. C.
Eggleston, Jere, 400 Saluda Ave., Columbia, S. C.

Eichorn, Mrs. Paul F., Box 1154, Tryon, N. C. 28782
Ekdahl, Conrad H., Box 81, Highlands, N. C.
Elliott, T. B., Woodland, N. C.
Ellis, Harry, Rt. 3, Bakersville, N. C.
Ellis, Mrs. W. F., 2000 Chestnut Street, High Point, N. C.
Ellis, Mrs. W. R., 35 Lake Forest Drive, Greenville, S. C. 29609
Entwistle, John, 810 Fayetteville Rd., Rockingham, N. C.
Erickson, Mrs. C. E., P. O. Box 8, Lancaster, S. C.
Erickson, John E., c/o Dept. of Zoology, N. C. State College, Raleigh, N. C. 27607
Eshelman, Mr. & Mrs. J. A., 905 Johnson St., High Point, N. C.
Evans, Mrs. Boyd V., Lone Acres, Box 765, Waynesville, N. C.
Evans, Mrs. J. Claude, 3542 University Blvd., Dallas 5, Texas
Everett, Mrs. Frank G., 213 Cochran Ave., Fayetteville, N. C.
Everson, Mrs. N. E., 4710 Park Ave., Wilmington, N. C.

Farrell, Mr. & Mrs. Edgar L., 1907 Brook Drive, Camden, S. C.
Faver, W. H., Jr., 3000 Huntington St., Orlando, Fla.
Felker, Mrs. Elizabeth, 118 Hillcrest Road, Raleigh, N. C.
Fennesbresque, Mrs. G. W., Box 156, Tryon, N. C. 28782
Ferguson, Mrs. Sally, Timberlane, Route 1, Waynesville, N. C.
Fish, Warren B., 522 Faris Road, Greenville, S. C.
Fisher, Dale, 38 Vincent Drive, Mt. Pleasant, S. C.
Fitchett, Mrs. Eva C., 312 W. Salisbury St., Box 452, Pittsboro, N. C. 27312
Fitz, Ora Lee, Hwy 74-76 East, Box 434, Chadbourn, N. C.
Flannagan, Mrs. E. G., Sr., 215 Young Ave., Henderson, N. C.
Folger, Mrs. Genevieve M., Route 1, Black Mountain, N. C.
Folk, Mrs. D. J., Box 407, Williston, S. C.
Fordham, Stephen C., Jr., Delmar Game Farm, Delmar, N. Y.
Foster, Mr. & Mrs. Miller C., Jr., 94 Woodvale Ave., Greenville, S. C. 29605
Fox, Miss Elizabeth, 704 Cedarwood Terrace, Henderson, N. C.
Fraley, Miss May and Miss Meade, 906 S. Church St., Salisbury, N. C.
Francis, Miss Marguirite, 101 Laurel Ave., Tryon, N. C. 28782
Frank, Joe Lee, III, 515 S. Pembroke Ave., Ahoskie, N. C.
Frarey, Carlyle J., Route 2, Farrington Road, Chapel Hill, N. C.
Frost, Colonel & Mrs. Norme, Box 271, Tryon, N. C. 28782
Fuller, David H., 1705 N. Walnut St., Lumberton, N. C.
Fulton, Mrs. C. Darby, c/o Columbia Theological Seminary, Decatur, Georgia
Funderburg, Dr. John B., Jr., Dept. of Biology, Florida Southern College, Lakeland, Florida 33802
Furrer, Mrs. John A., 407 Fourth Ave., W., Hendersonville, N. C.
Fussell, Johnny, III, 1412 Shepard St., Morehead City, N. C.

Gage, Miss Helen, Tryon Lodge, 304 Melrose Ave., Tryon, N. C. 28782
Gaines, Mrs. W. E., 228 Halcyon Ave., Winston-Salem, N. C.
Ganier, Albert F., 2112 Woodlawn Drive, Nashville 12, Tenn.
Ganzenmueller, C. H., Riverview Road, Gates Mill, Ohio 44040
Garlick, Miss Sallie, 420 Burwell Ave., Henderson, N. C.
Garlinghouse, Harold C., 2012 Cedar Lane, Knoxville 18, Tenn.
Garris, Miss Thelma, 112 Jackson Street, Roanoke Rapids, N. C.
Gary, Miss Mariel, Box 108, Henderson, N. C.
Gaston, Mrs. David A., Pinckney Road, Chester, S. C.
Gatewood, John Russell, 3706 Tech Blvd., Winston-Salem, N. C.
Geis, Mrs. Willis, 66 Hendrie Ave., Riverside, Conn. 06878
Geithner, Mrs. Marie, Box 177, Tryon, N. C. 28782
Gentile, Mrs. Vincent J., 7502 Barcroft Lane, Alexandria, Va., 22312
Georgia, Dr. Carlita L., Dept. of Science, N. Y. State Univ. College, Oswego, N. Y.
Geraty, Helen Anne, Geraty's Bluff, Yonges Island, S. C.
Gibbons, Margaret Y., 907 Munsen Spring Drive, Columbia, S. C.
Gilchrist, Mrs. M., Box 847, Tryon, N. C.
Gilliam, Mrs. Nora W., Route 1, Box 141, Traphill, N. C.
Gilreath, Mrs. Ruth, Route 1, Travelers Rest, S. C. 29690
Ginter, Mr. Karl, Box 3067, Charlotte, N. C.
Gladden, Mrs. William, 308 Fairlane Drive, Box 387, Lenoir, N. C.
Gleaton, Mrs. Elizabeth, Box 126, Springfield, S. C.
Glover, Mrs. L. M., Adams Run, S. C., 29426
Goforth, Mrs. Lois T., Olin, N. C.
Golde, Mr. & Mrs. Walter, Route 3, Box 144, Chapel Hill, N. C.
Goolsby, Miss Elizabeth, 3028 Manor Rd., Charlotte, N. C. 28209
Gordon, Mrs. Lewis, 29 Walker Terrace NE, Atlanta 9, Georgia
Graham, Mrs. W. A., Box 602, Warrenton, N. C.
Graves, Mr. & Mrs. C. Earl, Box 1265, Tryon, N. C. 28782
Graybeal, Mrs. Earl, West Jefferson, N. C.
Greaves, Dr. & Mrs. Edward D., 1003 E. Merrymount N., Blackwood, N. J.
Green, Lt. & Mrs. F. A., Box 1838, Myrtle Beach, S. C.
Greer, Mr. & Mrs. H. F., Linville Falls, N. C.
Greer, Mrs. R. T., Box 813, Lenoir, N. C.
Gregory, Henry, 110 Braswell St. (Box 1120), Rocky Mount, N. C.
Grey, Dr. John H., Jr., Box 445, Williamsburg, Virginia
Grier, Mr. & Mrs. H. W., 2016 Dalehurst Drive, Charlotte 5, N. C.
Griffin, Mrs. Olin, Route 2, Fort Mill, S. C.
Grimes, Mrs. J. W., Route 1, Box 213, Scotland Neck, N. C.
Grimes, S. A., Box 207, Jacksonville, Florida
Grimm, William C., Route 3, 15 Strawberry Drive, Greenville, S. C.
Grimshawk, Leeming, Box 154, Flat Rock, N. C.
Guignard, Mrs. S. R., 1721 W. Buchanan St., Columbia, S. C.
Gunter, Miss Ruth, 203 Tate St., Apt. A4, Greensboro, N. C. 27403
Guy, Mrs. B. H., P. O. Box 592375, International Airport, Miami, Fla. 33148

Hader, R. J., 813 Oakview Drive, Raleigh, N. C.
Haigh, Mrs. Chas. T., Sr., 118 Dobbin Ave., Fayetteville, N. C.
Haigh, Mrs. Margaret C., 111 Stedman St., Fayetteville, N. C.
Hailman, Jack P., 800 4th St. SW, Apt. N 402, Washington, D. C. 20024
Hair, Mrs. Thomas, Box 1066, Tryon, N. C. 28782
Haithcock, C. M., 88 Maple St., Badin, N. C.
Hall, Mr. & Mrs. Andrew Clifford, Sr., 305 N. Main St., Wake Forest, N. C.
Hall, Mrs. Henry, 217 Melrose Ave., Tryon, N. C. 28782
Hallman, Mrs. A. B., Box 394, Leesville, S. C. 29070
Halswanter, Mrs. L., Box 1052, Tryon, N. C. 28782
Hamilton, Mrs. Alexander, 116 Forest Lane, Tryon, N. C.
Hamilton, Mrs. David, Sr., 133 West End, Chester, S. C.
Hamilton, Mrs. J. L., 105 Reedy St., Chester, S. C.
Hamilton, Mrs. R. E., 704 Greenwood Drive, Dalton, Georgia 30720
Hamnett, William L., Box 2281, Raleigh, N. C.
Hampton, Mrs. Rebecca, Laurel Hill, N. C.
Hardcastle, Mrs. W. H., 213 Dobb St., Hertford, N. C.
Hardister, John P., Jr., Box 441, Lake Junaluska, N. C.
Harkins, Mrs. Beverly, Route 1, Box 525-A, Sneads Ferry, N. C.
Harless, Mrs. Hugh, 6 Sherwood Ct., Greenville, S. C.
Harper, Francis, 311 McCauley St., Chapel Hill, N. C.
Harris, Mrs. S. R., Jr., Box 108, Henderson, N. C.
Harrison, Mrs. A. L., 7 Seventh Ave., N. E., Hickory, N. C.
Harrison Miss Cary C., 110 Hibriten St., Lenoir, N. C.
Harrison, Hal H., 1509 Fairmont St., Cheswick, Pa.
Hart, Francis M., 1201 Rutledge Way, Anderson, S. C.
Hart, Miss Gladys, Route 1, Travelers Rest, S. C.
Hart, Miss Lillie, Route 1, Travelers Rest, S. C.
Hart, Miss Mildred, Route 2, Box 328, Columbia, S. C.
Hart, Miss Rosa Lee, Route 1, Travelers Rest, S. C.
Hartin, Mrs. S. E., 4520 Colonial Drive, Columbia, S. C.
Haswell, Mrs. S. Justice, 216 Wilson Court, Chapel Hill, N. C. 27514
Hatch, Jeremy J., Dept. of Zoology, Duke University, Durham, N. C.
Hatcher, John B., 901 Oleander Drive S. E., Aiken, S. C.
Hauser, Mrs. Roscoe, 309 Sylvan Rd., Fayetteville, N. C.
Hawkins, H. B., 1502 Quail Drive, Greensboro, N. C.
Hawkins, Mrs. Wade, 1753 Brooks Ave., Raleigh, N. C. 27607
Haworth, Mr. & Mrs. Chester C., South Main St., Ext., High Point, N. C.
Hay, Miss J. Lisle, 210 E. Godbold St., Marion, S. C.
Hayden, Mrs. J. F., 1112 Rockford Road, High Point, N. C.
Haynes, Miss Louise M., 160 S. Bennett St., Southern Pines, N. C. 28387
Hayward, Katherine B., Route 2, Box 328, Columbia, S. C.
Heady, Mrs. Chauncey M., P. O. Box 826, Aiken, S. C. 29803
Hearne, Miss Clara, Pittsboro, N. C.
Henderson, Mrs. E. M., 1615 Valley Road, Columbia, S. C.
Henderson, Mrs. Minto, Box 914, Tryon, N. C. 28782
Henderson, Mrs. Raymond E., Holly House, Thurmond, N. C. 28683
Hendren, Mrs. L. L., Box 148, Elkin, N. C. 28621
Hendrix, P. B., Woodberry Road, Route 1, Lexington, S. C.
Henretty, Mrs. Effie, General Del., Norfolk, Va. 23501
Henry, Miss Mary, 2405 E. Main St., Newberry, S. C. 29108
Herrin, Dr. Virginia, 204 Pineview Drive, Greenville, N. C.
Herring, Mrs. R. H., 811 Arendall Ave., Zebulon, N. C.
Hill, Mrs. K. L., Cedar Lawn, Society Hill, S. C.
Hill, Mrs. M. A., 333 Tenney Circle, Chapel Hill, N. C.
Hinton, Fred, 308 Warren St., Greensboro, N. C.
Hix, Miss Mary Elizabeth, 719 Roanoke Ave., Roanoke Rapids, N. C.
Hodges, Mrs. S. C., 2108 Wilson St., Durham, N. C.
Honman, George, Route 2, Box 239, Bryson City, N. C. 28713
Holbrook, Mrs. Julius F., Route 3, Box 313, John's Island, S. C. 29455
Holland, Ernest F., Carolina Sandhills Nat'l Wildlife Refuge, McBee, S. C.
Holman, Dr. David, Timmonsville, S. C.
Holmes, Dr. Robt. P., III, 306 Country Club Drive, New Bern, N. C.
Holmes, Miss Sidney, 315 McIver St., Greensboro, N. C. 27403
Holt, Miss Jane P., 413 Merritt Ave., Salisbury, N. C.
Hon, Mr. & Mrs. Ray, 7211 Lakeside Drive, Grove Park, Charlotte 5, N. C. 28212
Hoover, Mr. & Mrs. I. C., 225 Mt. Zephyr Drive, Alexandria, Va.
Horney, Mrs. J. E., 225 Woodrow Ave., High Point, N. C.
Howard, E. R., 220 Halcyon Ave., Winston-Salem, N. C.
Howard, Miss Mary H., Box 1041, Kinston, N. C.
Howell, Mrs. John, Route 2, Box 147, Travelers Rest, S. C.
Hudson, H. G., 303 Arbor Road, Winston-Salem, N. C.
Hudson, Roy D., 215 Essex Drive, Ormond Beach, Fla.
Huff, Miss Mary, Townsville, S. C.
Hughes, Mr. & Mrs. C. Garvin, 373 7th St., N. W., Hickory, N. C.
Hughes, Mrs. Minta, 226 W. Ray St., High Point, N. C.
Hundley, Mrs. Deane, Jr., 405 East Carr St., Wallace, N. C.
Hunt, C. Lindsey, P. O. Box 12045, Raleigh, N. C. 27605
Hunt, James H., 2214 Whitman Road, Raleigh, N. C.
Hunter, Miss Claudia W., 203 Horner St., Henderson, N. C.
Hunter, Mrs. Howard, Box 541, Clemson, S. C.
Hunter, Miss Mae, 203 Horner St., Henderson, N. C.
Hurt, Mrs. Alfred Burman, Route 2, Crumpler, N. C.

Huske, Miss Catsie, 227 Hillside Ave., Fayetteville, N. C.
Hutton, Mrs. Lester P., Box 102, Tryon, N. C.

Inglesby, Mrs. C. Jervey, 1900 Carolina Drive, Tryon, N. C.
Irby, Mrs. A. P., Sr., 5403 Colonial Drive, Columbia, S. C.
Irvine, John O., Jr., 102 Bellview St., Winchester, Va.
Ivey, Mrs. J. Worth, 222 Woodrow Ave., High Point, N. C.

Jacobs, Mrs. Harold W., 5854 Woodvine Road, Columbia, S. C.
James, Miss Elizabeth D., P. O. Box 1131, Tryon, N. C. 28782
James, Fred C., 100 Hanna St., Carrboro, N. C.
James, Miss Susan H., P. O. Box 1131, Tryon, N. C. 28782
Jeffers, W. H., Route 1, Florence, S. C.
Jeffreys, Paul B., Fremont, N. C.
Jenkins, Mrs. Terence, 122 Simons Ave., Summerville, S. C.
Jeanette, Mrs. S. E., 132 Young Ave., Henderson, N. C.
Jennings, Mr. & Mrs. Dudley, Box 774, Lumberton, N. C.
Jervey, Mrs. Frank J., Clemson House, Clemson, S. C.
John, Grace, 1934 Smallwood Drive, Raleigh, N. C.
Johns, Fred L., Box 5215, Zoology, State College Station, Raleigh, N. C.
Johns, Mr. & Mrs. Owen L., Jr., Rt. 2, Simpsonville, S. C.
Johnson, Miss Annie B., 201 Wilcox Ave., Marion, S. C.
Johnson, Miss Carroll, 201 Wilcox Ave., Marion, S. C.
Johnson, E. F., Box 228, McCellan, S. C.
Johnson, Miss Elizabeth, 728 Milton Ave., Rock Hill, S. C.
Johnson, Miss Falba, 201 Wilcox Ave., Marion, S. C.
Johnson, Miss Leila G., Murrells Inlet, S. C.
Johnston, David W., Dept. of Biol. Sciences, University of Florida, Gainesville, Fla.
Johnston, Miss Nellie, 304 Melrose Ave., Tryon, N. C.
Jolliffe, Miss Ruby, Oak Hall Hotel, Tryon, N. C.
Jones, Mr. & Mrs. Eugene J., 1209 E. Sandhurst Dr., Florence, S. C. 29501
Jones, Flippen, 226 Winston Dormitory, University of N. C., Chapel Hill, N. C.
Jones, Mrs. Harold H., P. O. Box 1202, New Bern, N. C.
Jones, James Henry, Route 1, Mocksville, N. C.
Jones, Lee, 1616 Wendover Road, Charlotte 7, N. C.
Jones, Mrs. M. K., 131 Ruth Street, Fayetteville, N. C.
Jones, Mrs. Oswald, Box 128, Tryon, N. C. 28782
Jordan, Mrs. L. H., Box 306, Isle of Palms, S. C.

Kale, H. W., II, 4001 Tampa Bay Blvd., Tampa, Fla. 33614
Kappel, Bruce E., 1508 Liberty Drive, Greensboro, N. C.
Karsch, Mrs. F. W. J., 510 Vance Street, Roanoke Rapids, N. C.
Kellam, Mrs. M. C., Route 2, 401 Shadow Valley, High Point, N. C.
Kelly, Mrs. Margaret Colvin, P. O. Box 68, New Bern, N. C.
Kendall, Mrs. B. W., 21 Cedarwood Lane, Columbia, S. C. 29205
Kidde, Mrs. Louise, Montclair, N. J.
Kilpatrick, Dr. Rachel H., Box 96, East Carolina College, Greenville, N. C.
King, Miss Frances H., 307 Melrose Ave., Tryon, N. C. 28782
Kinsey, Mrs. Louise B., 2921 Blossom St., Columbia, S. C.
Kirby, Miss Ethel, 160 Church St., Henderson, N. C.
Kirtland, Miss Eunice, Box 973, Tryon, N. C. 28782
Kiser, Mrs. Beulah, West Jefferson, N. C.
Klotz, Roy, 3036 W. 114th St., Chicago 55, Ill. 60655
Kanbenshue, Miss Gertrude, Box 776, Tryon, N. C. 28782
Knight, Mrs. Allen, 536 Virginia Ave., Statesville, N. C.
Knight, Mrs. Clarence, Route 3, Box 160, Greensboro, N. C.
Knight, Daniel K., First Federal Building, Rocky Mount, N. C.
Knight, Mrs. Ralph G., 741 Bolling Road, Roanoke Rapids, N. C.
Knox, Mrs. W. B., 112 W. Sharpe St., Statesville, N. C.
Koonce, Calvin B., Rock Quarry Road, Route 2, Raleigh, N. C.
Koonce, Mrs. M. B., P. O. Box 2250, Raleigh, N. C.
Koonce, Mr. & Mrs. Roland, Jefferson, N. C.
Korkon, Mildred H., DC, 215 Presbyterian St., Marion, S. C.
Kornblum, Miss, Box 1305, Tryon, N. C. 28782
Kreiger, Mrs. Fred W., Route 3, Box 241, Jacksonville, N. C. 28540
Kurtz, Mike, Jefferson, N. C.

La Boyteaux, Mrs. Robert, Idle Acres, Route 2, Gibsonville, N. C. 27249
Lamson, Mr. & Mrs. John L., 2010 Buckingham Road, Raleigh, N. C.
Lane, Mr. & Mrs. George W., Route 1, Garner, N. C.
Lane, Master Haden, 2536 Wrightwood Ave., Durham, N. C.
Lane, Thomas W., 1726 Roslyn Drive, Columbia, S. C.
Laskey, Mrs. Amelia R., 1521 Graybar Lane, Nashville 12, Tenn.
Lasley, R. L., 4011 Gilmore Drive, Greensboro, N. C. 27407
Lassiter, Mrs. M. C., 220 Grove Circle, Brevard, N. C.
Lattimore, Mrs. T. J., 135 Lancaster St., Aiken, S. C.
Lawrence, Mrs. W. B., 609 Byrd Blvd., Greenville, S. C.
Lawrence, W. B., Jr., Route 2, Box 117A, Kingstree, S. C.
Laybourne, Mrs. Roxie Collie, U. S. Fish & Wildlife Service, National Museum Bldg., Washington, D. C.
Ledbetter, Mrs. J. M., 803 E. Washington St., Rockingham, N. C.
Lee, Mrs. Frank, 2006 N. Duke Street, Durham, N. C.
Lee, Mary L., G3 Washington Apt., 2001 21st Ave., S., Nashville 12, Tenn.
Leeberg, Albert, 350 New Providence Road, Mountainside, N. J.
Leggett, Miss Martha, 536 Hamilton St., Coltrane Hall, Roanoke Rapids, N. C. 27870
Lemen, Miss Wilhelmina, 2420 Pershing Rd., Durham, N. C.
Lemly, Mrs. Conrad B., 1025 Van Hoy Street, Winston-Salem, N. C.

Lenon, Mrs. Edith K., 1412 Van Buren St., South Bend 28, Indiana
Lentz, Mrs. John, Jr., Ellerbe, N. C.
Leonard, Mrs. W. K., 215 Dupree Place, Aiken, S. C.
Lesley, Miss Sarah, Box 392, Lake Junaluska, N. C.
Lilly, Mrs. Richard, Charlotte Road, Fayetteville, N. C.
Lindsay, Mrs. J. W., 800 N. Rotary Dr., High Point, N. C.
Lipscomb, Sarah Harrison, 606 S. York St., Gastonia, N. C. 28052
Lister, Mrs. Jack L., 208 W. Main St., Mount Olive, N. C.
Little, Mrs. John R., 50 Baywood, Ross, California
Lockhart, Mrs. Mary H., 809 Dewey Street, Kinston, N. C.
Lofland, Mrs. Hugh B., 2820 Birchwood Drive, Winston-Salem, N. C.
Lovering, Miss Helen, Box 954, Wilmington, N. C.
Loyless, Miss Angie, Box 351, Sullins College, Bristol, Virginia 24201
Lucas, Mr. & Mrs. Albert, Box 326, Tryon, N. C.
Luden, Mrs. Lee W., P. O. Box 347, Roanoke Rapids, N. C.
Lyall, Miss Alice, Laurel Springs, N. C.
Lyon, Mrs. E. R., 206 Boulevard, High Point, N. C.

McCall, Mr. Clare M., 848 Burwell Lane, Columbia, S. C.
McCallum, Arch, Box 956, Davidson, N. C.
McCallum, Brown, Sr., 701 E. Jackson Street, Dillon, S. C.
McCallum, Mrs. Marion R., 800 8th Ave., Dillon, S. C. 29536
McCandless, Miss Margaret S., Saluda Rd., Chester, S. C.
McClam, Miss Maud S., Rt. 1, Box 153, Scranton, S. C.
McClees, Mrs. E. C., 117 N. Pender St., Elm City, N. C.
McCorkle, Miss Louise, Route 1, Iron Station, N. C.
McCown, Mrs. Maybelle, Box 182, Tryon, N. C. 28782
McCully, Miss Edith, Box 1143, Tryon, N. C. 28782
McDonald, Edna Mae, 328 W. Bartlette St., Sumter, S. C. 29150
McDonald, Mrs. R. F., 125 Burkwood Place, Aiken, S. C.
McDonald, Mrs. William P., 913 Hazelwood Lane, Martinsville, Va. 24113
McDowell, Mrs. S. T., 100 Cherry Road, Clemson, S. C.
McEachern, Miss Lula, McColl, S. C.
McEnally, Mrs. Charles N., 3909 Trent Pines Drive, New Bern, N. C.
McGeachy, Miss Helen, 812 Arsenal Ave., Fayetteville, N. C.
MacGregor, David, 102 Penarth Road, Spartanburg, S. C.
MacGregor, Miss Jeanette, Box 1099, Tryon, N. C. 28782
MacGregor, Mrs. Frank S., Box 1522, Tryon, N. C. 28782
McGrew, Mrs. G. E., 132 Lausanne Drive, Camden, S. C.
McKeever, Mrs. Willard W., 1922 Beverly Drive, Charlotte, N. C. 28204
McKey, Mrs. Harold G., Box 441, Tryon, N. C. 28782
McKinsey, Mrs. Eloise, RFD #3, Box 165, Columbia, S. C.
McLaurin, Mrs. Jack, 27 Conostee Ave., Greenville, S. C.
McLaurin, James L., Route 1, Bath, N. C.
McLure, Mrs. J. H., 146 West End, Chester, S. C.
McNab, Elizabeth, P. O. Box 156, Barnwell, S. C.
McNab, Mrs. W. H., Jr., 19 N. E. 18th Ave., Pompano Beach, Florida 33060
McNairy, Miss Ethel, 1814 St. Andrews Road, Greensboro, N. C. 27408
McRae, Mrs. Thomas, Jr., 1408 Cumberland Circle, Rockingham, N. C.
McReynolds, Mrs. J. H., 4672 N. Versailles Ave., Dallas 9, Texas

Mackintosh, Mr. & Mrs. C. G., 1309 Greenway Dr., High Point, N. C.
Macon, Mrs. William C., 1 Country Club Lane, Asheville, N. C.
Maffitt, Mrs. C. D., 219 S. 5th Street, Wilmington, N. C.
Manchester, Mr. & Mrs. E. M., 106 Woodbine Place, Lenoir, N. C.
Maner, Donald, Route 2, New London, N. C.
Marcom, Mrs. Frank D., Route 2, Raleigh, N. C. 27610
Marlatt, Mrs. William, Box 96, Garner, N. C.
Marvin, Mrs. Walter, 1204 Liveoak Parkway, So., Wilmington, N. C.
Mason, Mrs. Irma, Rocky Ledge, Saluda, N. C.
Massenburg, Miss Lillian, 324 Gary St., Henderson, N. C.
Massey, Greg, 1812 Market St., Wilmington, N. C.
Masten, John C., 779 Oaklawn Ave., Winston-Salem, N. C.
Mathis, L. C., P. O. Box 1422, New Bern, N. C.
Mattocks, Mrs. C. B., Box 1655, High Point, N. C.
Mattocks, Mr. & Mrs. James R., Box 462, High Point, N. C.
Maulden, Mrs. Paul R., Box 6, Davidson, N. C.
Maultsby, G. E., 405 Country Club Drive, Jacksonville, N. C.
Maxwell, A. H., 305 Tate St., Morganton, N. C. 28655
May, Mrs. Fred H., 211 Beall St., Lenoir, N. C.
Meacham, Frank B., 2716 Everette Ave., Raleigh, N. C.
Meadows, Miss Sara, 3301 Trent Road, New Bern, N. C.
Mebane, Mrs. W. M., 220 Hogback Rd., Tryon, N. C. 28782
Meeks, Mrs. Benjamin Spencer, Box 363, Ridgecrest, N. C.
Melson, Teddy, 372 Holland Drive, Statesville, N. C.
Menzer, Mrs. Roy E., 5321 Wrightsville Ave., Wilmington, N. C. 28403
Merry, Ellen, 1150 Glenn Ave., Augusta, Georgia
Miller, Mr. & Mrs. William C., 132 College St., Chester, S. C.
Mitchell, Mr. & Mrs. George L., 23 Colonial Drive, Wilmington, N. C.
Mitchell, Miss Ida, 1005 N. Eugene St., Greensboro, N. C.
Mixner, Miss Rebacca L., Box 168, Chatham, Mass. 02633
Moffett, Conley L., Div. State Parks, Ed. Bldg., Raleigh, N. C.
Moffett, Darry L., 2715 Peachtree Street, Raleigh, N. C.
Montgomery, Mrs. Wade A., 5500 Sardis Road, Charlotte 7, N. C.
Montgomery, Mrs. Walter S., 755 Plume St., Spartanburg, S. C. 29302

Moore, Genevieve, 202 Rowland Park Ave., High Point, N. C.
Moore, Mrs. Joe C., 1222 Hermitage Rd., Rock Hill, S. C.
Moore, Mrs. Myriam P., 9 Riverview Place, Lynchburg, Va.
Moore, Mrs. Ruth F., E. Lewis St., Whiteville, N. C.
Moore, Mrs. Spratt, 128 Ella Street, Chester, S. C.
Moreland, Mrs. D. E., 1508 Powell Drive, Raleigh, N. C.
Morgan, Mrs. J. I., 404 Church St., Farmville, N. C.
Morris, Mrs. George A., 303½ Woodsway Lane, Lenoir, N. C.
Morris, Mrs. Morgan, 227 Chestnut St., Tryon, N. C. 28782
Morrison, Mrs. A. E., 1610 Home Ave., Hartsville, S. C.
Morrison, Kenneth D., The Mountain Lake Sanctuary, Lake Wales, Florida
Morse, Mrs. Sybil K., Box 928, Tryon, N. C. 28782
Murphy, Claud A., 2043 Greenway Ave., Charlotte, N. C. 28204
Musaus, Marcus H., Box 581, Carolina Beach, N. C. 28428
Myers, Mrs. A. S., 224 West 5th Ave., Lexington, N. C.
Myers, Miss Helen, Beall Street, Lenoir, N. C.
Murphy, Claud A., 2043 Greenway Ave., Charlotte 4, N. C. 28204
Myers, Miss Garnett, 264 Charles St., Henderson, N. C.
Myers, W. Tom, Drawer 610, Lancaster, S. C.

Nash, Miss Ann, 718 Glenwalden Circle, Tryon, N. C. 28782
Nash, Mrs. Cheshire, 31 E. 60th St., Savannah, Georgia
Nash, Mrs. Thomas H., 2527 Wrightwood Ave., Durham, N. C. 27705
Neary, Mrs. William, 109 Forest Lane, Tryon, N. C. 28782
Nesslinger, Mr. & Mrs. Karl O., Box 296, Tryon, N. C. 28272
Neuman, Mrs. William, 1108 Gunnison Place, Raleigh, N. C.
Neville, Mrs. Gus, Box 188, Spring Hope, N. C.
Newhall, Mrs. J. G., N. Forest Beach, Hilton Head, S. C.
Newman, Miss Ethel, Winchester Center, Conn.
Newman, Walter R., 3201 Brentwood Road, Raleigh, N. C. 27604
Newman, Mrs. E. N., Box 800, Waynesville, N. C.
Newsom, Mrs. Elizabeth P., 110 West First Ave., Sandersville, Georgia
Nexsen, Mrs. L. J., 608 Fourth Ave., Kingstree, S. C.
Neylans, Mrs. Catherine, 883 Winchester Circle, Macon, Georgia
Nichols, Mr. & Mrs. Charles B., 414 W. Whitner St., Anderson, S. C.
Nielson, Miss Patricia Anne, 601-A Hillsboro Road, Carrboro, N. C.
Nooe, Miss Sarah M., Queens College 7, Charlotte, N. C.
Norfleet, Mr. & Mrs. Chas. E., 2721 Pilgrim Court, Winston-Salem, N. C.
Norris, Robt. A., Tall Timbers Research Sta., Route 1, Box 112, Tallahassee, Florida 32301
Norton, Mrs. John, Box 1075, Tryon, N. C. 28782
Nowell, Mrs. Julia L., 311 Lakeside Drive, Garner, N. C.
Nowlin, Mrs. Preston, 946 Bromley Rd., Charlotte, N. C. 28207
Nowlin, Preston, Jr., 712 Harding Ave., Kinston, N. C.

Oakley, Mrs. Cledith E., East Davis St., Smithfield, N. C.
Ogburn, Elizabeth, Box 72, Summerfield, N. C.
Oliphant, Albert A., 110 Sunset Drive, Chester, S. C.
Ongar, Mrs. Phillip, Box 815, Tryon, N. C. 28782
Orr, O. H., Philcrest, Route 6, Raleigh, N. C.
Otto, Mrs. John R., 2447 Medway Drive, Raleigh, N. C.
Overing, Robert, 119 Willow Lane, Decatur, Georgia
Overing, Mrs. Wilella P., 119 Willow Lane, Decatur, Georgia
Owen, Mrs. Mary, Coltrane Hall, 536 Hamilton St., Roanoke Rapids, N. C.

Page, Mrs. Richard G., Jr., 424 Westover Ave., Winston-Salem, N. C.
Parker, Mrs. Ben T., 424 Washington St., Roanoke Rapids, N. C.
Parker, Mrs. D. Ralph, 813 Carrick Ave., High Point, N. C.
Parker, Roy, Jr., 3548 Whitehaven Parkway, N. W., Washington, D. C.
Parkes, Kenneth C., Asso. Curator of Birds, Carnegie Museum, Pittsburgh 13, Pa.
Parks, Richard A., 2303 Pembrook Place, N. E., Atlanta 24, Georgia
Parks, Mr. & Mrs. Thomas, 110 Mimosa Lane, Lenoir, N. C.
Parnell, James F., Biology Dept., Wilmington College, Wilmington, N. C.
Parrott, Mrs. G. F., Willowbrook Drive, Huntington Valley, Pa.
Parsons, Mrs. David H., Jr., 1502 Nathan Hunt Road, Guilford College Branch, Greensboro, N. C.
Patten, Lewis, 614 Swift Ave., Durham, N. C.
Patterson, Mrs. W. D., 742 E. Franklin St., Chapel Hill, N. C.
Payne, Mrs. Paul S., 2013 Woodland Drive, Durham, N. C.
Peake, Richard H., Jr., Box 163, Cullowhee, N. C.
Pearsall, Mrs. H. S., 1405 W. Haven Blvd., Rocky Mount, N. C.
Pearson, Mrs. Grady E., 1540 New Hope Road, Gastonia, N. C.
Peden, Mr. & Mrs. John T., Box 366, Tryon, N. C.
Peeling, Miss Ruth, Route 1, Morehead City, N. C. 28557
Peeples, Mrs. J. B., Box 193, Fort Bragg, N. C.
Pendleton, Mrs. A. O., P. O. 307, Roanoke Rapids, N. C.
Perrett, Mr. & Mrs. Geo. W., 424 Forest Ave., Greensboro, N. C.
Peters, Ellen, 433 W. 21st St., New York, N. Y. 10011
Peters, Mr. & Mrs. Harold S., 98 Querida St., Bridgeport 4, Conn.
Pettingill, Olin Sewell, Jr., Laboratory of Ornithology, Cornell University, Ithaca, N. Y.
Pettit, Dr. & Mrs. Harold, 107 Ashley Ave., Charleston, S. C.
Pfaff, Mrs. Elizabeth, 1812 Greenbrier Rd., Winston-Salem, N. C.
Pfohl, Mrs. James, 2228 Malvern Road, Charlotte, N. C. 28207
Phillips, Mrs. Edgar E., 422 Roselane Lane, Raleigh, N. C. 27610

Pickens, Dr. A. L., 1729 E. Lombardy Circle, Charlotte 3, N. C.
Pipkin, Spike, 360 Berry St., Orangeburg, S. C.
Pippin, Mrs. Allen, III, Pearce Road, Zebulon, N. C.
Pittman, Mrs. D. W., Box 205, Whiteville, N. C.
Plybon, Charles, 1325 Draymor Ave., Charlotte, N. C. 28209
Poe, Miss Elizabeth W., 206 Bradford Ave., Fayetteville, N. C.
Poindexter, Estelle, P. O. Box 345, Myrtle Beach, S. C.
Polk, Mrs. H. T., 104 Dogwood Drive, Clemson, S. C.
Pond, Eugene B., Highland Park, Beaufort, N. C.
Poteat, Mr. & Mrs. J. R., Box 96, Tryon, N. C. 28782
Potter, Miss Katherine, Oak Hall Hotel, Tryon, N. C. 28782
Potter, Mrs. T. R., 1000 Chamberlain St., Raleigh, N. C.
Potter, Mrs. W. T., 702 E. Washington St., Greenville, S. C.
Powell, Miss Mary Lou, 108 E. Smith St., Whiteville, N. C.
Powell, Mr. & Mrs. T. J., 1334 Park View Station, Kinston, N. C. 28501
Prather, Mrs. Charles G., Veterans Adm. Center, Wadsworth, Kansas 66089
Presnell, Anne, Mendenhall Hall, UNCG, Greensboro, N. C.
Presnell, Miss Enolia Sibyl, 1244 E. Blvd., Charlotte 3, N. C.
Presser, Mrs. E. J., 217 S. Laurel Ave., Charlotte 7, N. C.
Price, Mrs. L. A., Box 56, New London, N. C.
Price, Rev. R. E., Jr., Box 883, First Baptist Church, Laurinburg, N. C.
Price, Reginald L., 641 Colville Road, Charlotte 7, N. C.
Prime, Mrs. Lloyd, 210 Valley Road, Southern Pines, N. C.
Prior, Gertrude, Sweet Briar, Virginia
Prosser, Capt. & Mrs. Albert L., 118 Main St., Box 92, Springvale, Maine
Pyne, Mrs. Geo. C., Jr., 806 Vickers Ave., Durham, N. C. 27701

Quigley, Miss Henrietta, 433 W. 21st St., New York, N. Y. 10011

Radford, Mrs. W. D., 1404 National Ave., New Bern, N. C.
Ragsdale, Mrs. William G., Jr., Magnolia Farm, Jamestown, N. C.
Ramsey, D. Hiden, 58 Woodland Road, Asheville, N. C.
Rankin, Mrs. P. R., Jr., Ellerbe, N. C.
Rankin, Mrs. Sam C., 230 Hillside Ave., Fayetteville, N. C.
Raoul, Kathleen, 2 Appleton St., Cambridge 38, Mass.
Rast, Dr. J. Marvin, Cornell Arms, Apt. 3-B, Columbia, S. C.
Read, Everard, Box 9444, Johannesburg, Union of South Africa
Rembert, R. H., 166 Pearson Drive, Asheville, N. C. 28801
Rial, T. M., 791 Boardman Road, Dumbarton Oaks, Aiken, S. C.
Richardson, Mrs. Anne Worsham, 7 Arcadian Park, Avondale, Charleston, S. C.
Richardson, Emma B., 128 Bull St., Charleston, 16, S. C.
Richmond, Paul, Box 49, Hendersonville, N. C.
Rines, Mrs. Elaine, Route 7, Box 373, Statesville, N. C.
Rivers, Mrs. Leon M., Box 215, High Point, N. C.
Roberson, Mrs. N. S., Route 1, Box 114, Williamston, N. C .
Roberson, Mrs. S. L., 530 Cedar St., Roanoke Rapids, N. C.
Robertson, Elizabeth C., 140 Broad St., Charleston 4, S. C.
Robinson, Miss Miriam, 813 Ravenwood Drive, Raleigh, N. C.
Robinson, Mrs. W. S., 137½ West End St., Box 397, Chester, S. C.
Rockwell, Col. Paul, 142 Hillside St., Asheville, N. C.
Rockwell, Mrs. Paul, 142 Hillside St., Ashevile, N. C.
Roddy, Mrs. Margaret M., 13219 Blossomheath Lane, Dallas 30, Texas 75240
Robinson, Mrs. Florence H., Barnesville (Charlotte County), Virginia 23914
Rodgers, Carl J., 15 Park Circle, Kingstree, S. C.
Rogers, Mr. & Mrs. Paul H., 1105 Dogwood Lane, Hartsville, S. C.
Rogers, Mrs. W. Davis, 47 Legare St., Charleston 4, S. C.
Rollins, Mrs. Frank H., River Road, Washington Park, Washington, N. C.
Roof, Mrs. Rosalyn, Wren Road, Route 1, Lexington, S. C.
Rose, Thos. D., P. O. Box 595, Chapel Hill, N. C.
Ross, Miss Blanche, 303 White St., Morganton, N. C.
Ross, Hollis T., West Lawn, Lewisburg, Pa.
Russell, Jane, 715 Crescent Ave., Greenville, S. C.
Rust, Mrs. Susie Rogers B., Route 2, Kinston, N. C. 28501

Sackett, Mrs. Walter M., Box 1252, Tryon, N. C. 28782
Sadler, Mrs. David H., 1214 Hermitage Road, Rock Hill, S. C.
Saltz, Mrs. Gladys, Route 3, Hendersonville, N. C.
Sanders, Bob, 2726 Blossom St., Columbia, S. C.
Sanders, P. H., 32 Mount Bolus, Chapel Hill, N. C.
Sanders, Dr. & Mrs. W. B., 606 Coolidge St., Chapel Hill, N. C.
Satcher, Mrs. Elizabeth R., 2211 Morningside Drive, Augusta, Georgia
Satterfield, Mrs. C. S., 223 Blanche St., Clayton, N. C.
Satterthwaite, Mrs. E. H., 311 E. Main St., Washington, N. C. 27889
Schiffman, Miss Etta, 2015 Bluemont Drive, Greensboro, N. C.
Schiffman, Saul W., 23 Chunns Cove Road, Asheville, N. C.
Schermerhorn, F. J., High Hampton Inn, Cashiers, N. C.
Schrader, Dr. & Mrs. S. H., Dept. of Zoology, Duke Univ., Durham, N. C. 27706
Schudder, Mrs. Charles, 200 Wildwood St., Spartanburg, S. C.
Schulken, Mr. & Mrs. F. J., 109 E. Williamson St., Whiteville, N. C.
Scott, Frederic R., 115 Kennondale Lane, Richmond, Va. 23226
Seebeck, Newton H., Jr., 106 Lynwood Drive, Aiken, S. C. 29801
Segars, Mrs. J. H., 306 Fairlane Drive, Lenoir, N. C.
Shaftsbury, Dr. A. D., Prof. of Biology, Greensboro College, Greensboro, N. C.
Shaftsbury, Mrs. Archie D., 315 Tate Street, Greensboro, N. C.
Shamburger, Miss Anne, 517 Highland Ave., Greensboro, N. C.

Shapleigh, Mrs. Donald S., 2100 Forest Drive, Camden, S. C.
Sharpe, Mrs. Robt. B., 103 Ledge Lane, Chapel Hill, N. C.
Shaw, Mrs. J. A., 5948 Bragg Blvd., Fayetteville, N. C.
Shephard, Mrs. Warren, 1420 Westmont Drive, Asheboro, N. C.
Sherratt, Thos. A., Box 94, Rt. 3, W. Wilson Creek Drive, New Bern, N. C.
Sherrod, Mrs. Edith Moore, 86 Hillcrest Drive, High Point, N. C.
Shipley, John R., Route 2, Germanton, N. C.
Showalter, Mrs. Merle, 2820 Barmettler St., Raleigh, N. C.
Shuler, E. G., 195 Club Acres, Star Route, Orangeburg, S. C.
Shuler, Mrs. H. D., Rt. 5, Box 70, Sumter, S. C.
Shull, Miss Wilhelmina, N.C.O. Hospital, Gastonia, N. C.
Siceloff, Miss Bess, 539 Parkway, High Point, N. C.
Siceloff, Miss Mary Alice, 539 Parkway, High Point, N. C.
Sigman, Thomas O., Box 246, Route 3, Hickory, N. C.
Siler, Richard H., Route 2, Seven Springs, N. C.
Simmons, Mrs. Claudia, 108 Ridge Lane, Chapel Hill, N. C.
Simons, Miss Elizabeth D., 32 "A", Bee Street, Charleston, S. C. 29403
Simril, John W., 156 Saluda St., Chester, S. C.
Simons, Andrew, 4 Lamboll St., Charleston 2, S. C.
Simons, Mrs. Chas. Inglesby, Box 388, Columbia, S. C. 29202
Simpson, Mark, 210 Ridgeway Ave., Statesville, N. C.
Skaale, Mrs. A. J., 1006 Lake Boone Tr., Raleigh, N. C.
Sledge, J. B., Jr., 60 Hopkins St., Newport News, Va., 23601
Sloan, Mrs. A. T., 1916 Georgia Ave., Winston-Salem, N. C.
Smith, Dudley C., P. O. Box 1201, Tryon, N. C. 28782
Smith, Ralph R., 25 Hampstead Road, Asheville, N. C. 28804
Smith, Wendell P., 911 E. Street, North Wilkesboro, N. C.
Smithey, Miss Mamie, Jefferson, N. C.
Smyre, Mrs. W. F., Route 3, Box 410, Guilford College Branch, Greensboro, N. C.
Snider, Miss Helen, 328 Bartlette St., Sumter, S. C.
Snow, Mrs. Marene, 3630 Peachtree Rd. N. W., Apt. 21, Atlanta, Ga., 30326
Snyder, Donald B., Biology Dept., Geneva College, Beaver Falls, Pa., 15010
Snyder, Mrs. Mark D., 1245 Chatham Road, Waynesboro, Virginia
Spahr, Mrs. Herman, 345 Berry St., N. E., Orangeburg, S. C. 29115
Speed, Miss Sarah A., 913 Dacian Ave., Durham, N. C.
Spinks, Mrs. John D., 651 Summit St., Winston-Salem, N. C.
Spratt, Miss Barnett, Lake Junaluska, N. C.
Sprott, Mrs. Gordon, Camp Deerwoode, Brevard, N. C.
Sprunt, Alexander, Jr., The Crescent, Charleston, S. C. 29407
Sprunt, Kenneth, 1234 Fairway Drive, Wilmington, N. C.
Stephens, Mr. James L., Jr., Box 841, Lumberton, N. C.
Steppenbeck, Mrs. Paul, Box 404, Lake Junaluska, N. C.
Stevens, Dr. C. L., Campobello, S. C.
Stevenson, Henry M., Zoology Dept., Florida State University, Tallahassee, Fla.
Stewart, Mrs. Pearson H., 112 Glendale Drive, Chapel Hill, N. C. 27514
Stockwell, Dr. Henry, c/o Charlotte Memorial Hospital, 1000 Blythe Blvd., Charlotte, N. C. 28204
Stoddard, H. L., Sr., Route 3, Box 139, Thomasville, Ga.
Stone, Hal M., By-Pass 72, Chester, S. C.
Stone, Sam R., By-Pass 72, Chester, S. C.
Stone, W. C., P. O. Box 117, Chester, S. C.
Stowell, Miss Grace, Box 1342, Tryon, N. C. 28782
Strasser, Marie J., Country Club Road, Brevard, N. C.
Stribling, Miss Elizabeth, Whitewater Rd., Sapphire, N. C.
Stroupe, Mrs. V. S., 167 Chatham Rd., Asheville, N. C.
Stubbins, Rev. Roland C., P. O. Box 5, Efland, N. C.
Stupka, Arthur, Route 1, Gatlinburg, Tenn.
Summer, Miss Linda M., P. O. Box 415, Florence, S. C. 29561
Suttman, Miss Ida, 7332 Bernard Ave., Cincinnati, Ohio, 45231
Sutton, Miss Fannie G., 112 E. Capitola Ave., Kinston, N. C.
Sykes, Paul W., 1522 LaFayette Blvd., Norfolk, Va. 23509

Tanner, James T., Dept. Zoology, University of Tennessee, Knoxville, Tenn. 39720
Taylor, G. Thomas, Science Dept., Atlantic Christian College, Wilson, N. C.
Taylor, Mr. & Mrs. W. H., 115 Terrace Ave., Murphy, N. C. 23906
Terres, John K., P. O. Box 571, Chapel Hill, N. C.
Terrell, Ben Park, Jr., 3445 Bradley Place, Raleigh, N. C.
Terry, Miss Rose, 325 Melrose Ave., Tryon, N. C. 28782
Thies, Miss Ernestine, 325 Hermitage Road, Charlotte, N. C.
Thomas, Miss Ellen, 933 Milledge Road, Augusta, Ga.
Thompson, Mrs. George A., Route 1, Box 72, Chadbourn, N. C.
Thompson, Mrs. Hugh S., 111 N. Ervin St., Darlington, S. C.
Thompson, John, First Federal Bldg., Rocky Mount, N. C.
Thompson, Mark, 1418 Chester Road, Raleigh, N. C.
Thompson, Mr. & Mrs. Matt L., Box 88, Chapel Hill, N. C.
Thompson, Rev. & Mrs. Walter E., 1412 Victory St., Columbia 4, S. C.
Thompson, Waters, Box 874, Southport, N. C.
Thornburg, Margaret, 667 Euclid Ave., Glen Ellyn, Illinois
Thurber, Walter A., 2445 Woodstock Dr., Bethlehem, Pa. 18017
Tidd, Mrs. Katherine, Box 194, Tryon, N. C. 28782
Tignor, Mrs. T. W., 315 Bond St., Enfield, N. C. 27823
Tilghman, James C., Bird Lodge, Route 5, Box 154, Henderson, N. C.
Tipton, Mrs. D. G., 2406 Fairfield Ave., Greensboro, N. C.
Tomkins, Ivan R., 1231 E. 50th St., Savannah, Ga. 31404
Trahan, Mr. & Mrs. Joe, Route 1, Ellerson, Virginia
Troutman, Mr. & Mrs. John L., Route 8, Raleigh, N. C.
Tuck, Mrs. C. E., 156 Spring St., West Bridgewater, Mass. 02379

Tucker, Mrs. Glenn, RFD #1, Flat Rock, N. C.
Turville, Mrs. W. C., U. S. Naval Hospital, Camp Lejeune, N. C.

Underhill, Chris, Wendell, N. C.
Underwood, R. W., 1325 Welcome Circle, Durham, N. C. 27705
Underwood, Ronnie, 820 Meadow Rd., Statesville, N. C.
Urich, Mrs. Mary H., 207 Summer Rest Road, Wilmington, N. C. 28403

Van, Miss Ebba, 4131 Forest Drive, Columbia, S. C.
Van Cleave, Mrs. C. D., 752 Old Mill Road, Chapel Hill, N. C.
Van Cleve, G. Bernard, 323 S. Fairmont St., Pittsburgh, Pa. 15232
Vaughan, Mrs. L. W., 2210 Elkridge Drive, Camden, S. C.
Vernon, Mrs. James W., Box 1139, Morganton, N. C.
Veronee, Wm. R., Rt. 3, Box 257, Johns Island, S. C.
Vigodsky, Mrs. Nathan, Box 236, Westminster, S. C.

Wade, John E., 209 Chestnut St., Greer, S. C.
Wadewitz, Miss Martina, Highlands Biological Station, Highlands, N. C.
Walker, Mrs. Emma, 119 Duke Ave., Columbia, S. C.
Walker, Sam A., Poplar Branch, N. C.
Wallace, Dr. George L., Jr., 100 Oakdale St., Martinsville, Va.
Ware, R. E., Box 792, Clemson, S. C.
Waring, Joseph I., M.D., 1500 Old Town Road, Charleston, S. C.
Warren, Col. & Mrs. Charles H., 2216 Oxford Road, Raleigh, N. C.
Warren, Mrs. C. S., 307 Beall St., Lenoir, N. C.
Warren, Edward S., 207 Pine Road, New Bern, N. C.
Warren, Mrs. W. J., Rose Lane, Sylva, N. C.
Watkins, Miss Frances S., 601 E. Main St., Washington, N. C. 27889
Watson, Mrs. S. R., 167 Belle Street, Henderson, N. C.
Weaver, Truit, Crumpler, N. C.
Webster, Miss Elizabeth, Box 1420, Tryon, N. C. 28782
Weeks, Mrs. S. Cameron, Box 411, Tarboro, N. C.
Weeks, Deborah, Bethania, N. C.
Weisner, Mrs. Ralph H., 1107 New Garden Rd., Guilford College Branch, Greensboro, N. C.
Weisner, Mrs. Smith, Box 776, Tryon, N. C. 28782
Welch, Edmund, P. O. Box 2043, Greenville, N. C. 27835
Welch, Francis W., Jr., 16 N. Aurora St., Easton, Md.
Welch, Mike, 23 South St., Williamstown, Mass. 01267
Welfling, Mrs. Weldon, 3701 Sutherland Road, Shaker Heights, Ohio 44122
Welty, F., 508 Moylon Ave., Moylon, Pa.
West, Morris, 557 Shady Lane, Forest Hills, North Wilkesboro, N. C.
West, Mrs. Thag, 500 Woodbrook Court, High Point, N. C.
West, Dr. and Mrs. Wm. A., Box 1283, Tryon, N. C. 28782
Westmoreland, Miss Ann, 1103 Evergreen Ave., Goldsboro, N. C.
Wheeler, Mrs. D. L., Box 526, Bolling Road, Roanoke Rapids, N. C.
Wheeler, Mrs. L. D., Box 431, Whiteville, N. C.
White, Mrs. E. M., 125 West End, Chester, S. C.
White, J. Harry, 717 Manly Place, Winston-Salem, N. C.
White, Stanley, P. O. Box 648, Roanoke Rapids, N. C.
White, William B., 1617 Beaver Dam Road, Raleigh, N. C.
Whitescarver, Mrs. F. E., 1018 Country Club Drive, High Point, N. C.
Whitfield, Kerr and Jim, 3605 Swann Drive, Raleigh, N. C.
Whitfield, Mrs. Lewis, 1811 Lakeshore Drive, Fayetteville, N. C.
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ABOUT OUR COVER

The White Ibis on the cover of the present issue of *The Chat* was photographed 1 June 1963 at Battery Island, North Carolina, by Jack Potter. He used Kodachrome X film in his 35 mm Nikkorex F camera with 200 mm f4 Auto-Nikkor lens.

The expensive process color cover was made possible through the generosity of the owners of Theo. B. Davis Sons, Printers, of Zebulon, North Carolina. This firm donated both the color separations and the four-color offset printing. Paper for the cover was contributed by Snyder Paper Company, which has offices in High Point, Hickory, and Charlotte.

A field note concerning the White Ibis appears on page 94 of this issue. It is accompanied by another of Mr. Potter's photographs. He also deserves credit for the Evening Grosbeak picture on page 69.—EDITOR

BACKYARD BIRDING

(Continued from Page 87)

The four Peacock children named their big friend "Baldy". They were advised in their care of the bird by the Charleston Museum and the state game warden. They proudly acclaim themselves "temporary custodians" of the eagle, and will keep it until the warden says the bird is sufficiently strong to return to the wild.

The children told the reporter that noise makes the eagle nervous and he flies into the fence. But it likes to be wet with the sprinkler when it is fine spray. It will raise its wings to the water, then take a sunbath to dry off.

The kids said that Baldy would "eat you alive" three weeks ago when he first came to them, but had become tame enough to take shrimp from the boys' hands. They also fed the big bird fish from their grandfather's pond.

The caption under the picture of the immature eagle reads: "Dillon has many travelers who pass through on Highway 301, but this one came by accident. Shot by mistake, the bird has now become a family pet." (The moral of this story could be: Stop shooting all large hawks, which are becoming almost as scarce as Bald Eagles.)

Mrs. Braddy added that it was quite a coincidence that she and her husband were out riding the afternoon that the eagle was shot and that they were the first to see and help identify him. They watched his recuperation with interest and concern.

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. **Annual dues** for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Supporting, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

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All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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The Chat

Bulletin of The Carolina Bird Club

Vol. 28, No. 4 Dec. 1964

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Birds

The Chat

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Vol. 28 Dec. 1964 No. 4

EDITOR ....Eloise F. Potter, Box 487, Zebulon, N. C.
GENERAL FIELD NOTES . . B. R. Chamberlain, Rt. 1, Wadmalaw Island, S. C.
BACKYARD BIRDING ....Annie R. Faver, Rt. 2, Eastover, S. C.
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Cover Photo—Male Sparrow Hawk photographed by Fred L. Johns.

PRESIDENT'S PAGE

Certainly all will agree that the September 1964 *Chat* has the most attractive and colorful cover in the history of our CBC publication. In addition to the first and only color cover, this issue contains an assembly of very interesting reports and the CBC membership list, all of which make it a most valuable bulletin. This model issue of outstanding beauty and quality shows what our club members are capable of doing. It would be a great tribute to the founders of the CBC if every issue of the *Chat* would follow this cover format. Such covers would provide an opportunity for members to assemble a personal file of bird pictures that would equal or surpass those available in most bird books today.

Many, many thanks go to our Editor and to her husband, Jack Potter, who took the beautiful photograph of the White Ibis in flight; to Theo. B. Davis Sons, Printers, who generously made possible the expensive color printing at no cost to CBC; and to Snyder Paper Company, which contributed the paper for the cover.

Many members wonder why the *Chat* isn't issued on the published dates. There is no fault on the part of the Editor, or on the part of the Department Editors, individual contributors, or those responsible for mailing the magazine. Every effort is made to submit copy to the printers 30 days prior to the first day of the month of publication. The printing is done at the State College Print Shop in Raleigh, at a considerable savings over commercial costs, but at their convenience of time. In the case of the September issue, copy was submitted on 4 August, but the printers took over 90 days to get the job done. Except for occasional special announcements, the *Chat* is not outdated when received late, and it is always valuable if filed for future reference. However, any publication subscribed to is usually looked forward to and wanted on time.

Excluding the period from 1944 to 1951, the CBC has depended for Headquarters upon the dedication of Harry Davis and conveniences existing in the N. C. State Museum. The State College Print Shop has met our printing requirements for the past 14 years. The CBC has benefitted greatly from the economies inherent in this arrangement, and members are ever grateful to Mr. Davis and the Museum staff. Nevertheless, our organization should realize that these conveniences are contingent upon situations beyond our control, and sooner or later, changes will have to be made. For example, the State College Print Shop must give priority to the printing requirements of the various branches of the University of North Carolina. As the University grows, there will be fewer working hours available to meet the needs of non-profit organizations such as the CBC. In considering the possibility of having our printing done by a commercial shop, we must realize that costs would increase by at least 25% over the present amount. Likewise, enlarging our Newsletter and changing from mimeograph to offset printing would increase expenses. I hope this explains why your *Chat* isn't received on time and why the Newsletter isn't printed more clearly. In the past, suggestions that the CBC dues be raised have been voted down. Until sufficient income is available to meet added costs for improvements, the present situation will continue.

Our CBC is a worthwhile organization, and the vitality of the club is reflected in the *Chat*. Its attractiveness and scope of content should always be maintained and improved upon whenever possible; but until our membership is ready to finance the higher costs, we must, of necessity, continue under present arrangements, in spite of exasperating delays by the printers.

Again, thanks! to the Potters for giving us a prize issue of *Chat*.

Executive Committee at Work

Since the election of officers at the May meeting at Cashiers, North Carolina, your Executive Committee has met twice, and among other things, has approved the division of the two-state CBC area into three Field Trip

SMITHSONIAN INSTITUTION DEC 29 1964

Regions, each under the responsibility of its respective vice-president. All of South Carolina is Region No. 3. Western North Carolina is Region No. 1, and Eastern North Carolina is Region No. 2. A line drawn from the bend in the State boundary near Laurinburg, north to the Virginia border near Reidsville, separates the two North Carolina Regions. Vice-presidents will, in the future, be elected from within their respective Regions. The four members-at-large will also be similarly distributed, except that two will come from Region No. 3 (South Carolina). This arrangement offers a better "chain of command" and should facilitate the delegation of responsibilities for better management and operation of the CBC.

It is well to note here that the attendance at our Field Trip meetings has increased greatly, and this poses the problem of finding new places for our meetings which have adequate accommodations for 100 or more people. We seem to have no alternative except to rotate and return to our old standby areas, which, after all, have about as good birding as we might find anywhere else.

Committees Named

In keeping with my responsibilities, I have appointed the following committees. **Nominating Committee:** Mrs. Charlotte Hilton Green, chairman, Raleigh, N. C.; Mrs. H. L. Davis, Spartanburg, S. C.; Miss May W. Puett, Greenville, S. C.; Mrs. Robert Coleman, Charleston, S. C.; C. R. Hughes, Lenoir, N. C.; and Mrs. Edward Marrow, Tarboro, N. C. **Scholarship Committee:** Mrs. Margaret Y. Wall, chairman, Greensboro, N. C.; Gilbert Bristow, Columbia, S. C.; Dr. Thomas L. Quay, Raleigh, N. C.; and Mrs. Clyde Sisson, Columbia, S. C. **Records Committee:** Eloise F. Potter (Editor of *Chat*), chairman, Zebulon, N. C.; B. Rhett Chamberlain, Wadmalaw Island, S. C.; and Dr. James F. Parnell, Wilmington, N. C.

Fall Field Trip Highlights

The Fall Field Trip meeting at Myrtle Beach, South Carolina, I considered a huge success in view of the rains that prevailed over the two states and the threatening hurricane Isbell. Eighty reservations had been reported prior to the actual meeting. I felt that only a daring and rugged few would show up; however, 93 arrived and registered—indeed, a happy surprise. On Saturday, the weather broke clear and warm. Some even went swimming in the mild surf. We had a delightful picnic at the Myrtle Beach State Park where Mr. Chapman, owner of the Chesterfield Inn, personally supervised the grilling of hamburgers for a good hot lunch. Two boat trips were arranged to carry birders to the entrance to Murrells Inlet. Groups were taken to Brookgreen Gardens and to Huntington State Park. The evening meetings were held at the Public Service Authority's Auditorium. Two movie films were shown, "People, Pests and Pesticides" and "World in a Marsh." The bird count was conducted by George Smith, resulting in 122 species recorded. Many thanks to Mr. Chapman and to Mr. Britton, manager of the Chesterfield Inn, for their hospitality and for arranging many of the details in advance of our meeting.

Put These on Your Calendar

The mid-winter Field Trip meeting is scheduled for 22-24 January at Morehead City, N. C., and the Spring Field Trip is set for 30 April-1 May at Clemson, S. C. This meeting is the annual meeting of the General Assembly at which time the Nominating Committee will present a new slate of officers to be elected.

NORME D. FROST

CAROLINA
N. C.
S. C.
BIRD CLUB INC.

NEWS AND COMMENTS

Pictured above is the newly adopted CBC shoulder patch now available from the club treasurer for 50¢ each. Treasurer W. L. Hamnett suggests that members wanting these patches send payment for them with their 1965 club dues to him at the N. C. State Museum, Box 2281, Raleigh, North Carolina.

Spring Count Dates

Suggested dates for the 1964 Spring Count are 23 April through 9 May. Forms will be mailed to all 1963 compilers before 1 April 1964. New compilers should send requests for forms to the Editor, Box 487, Zebulon, North Carolina.

Sooty Tern Banding Project

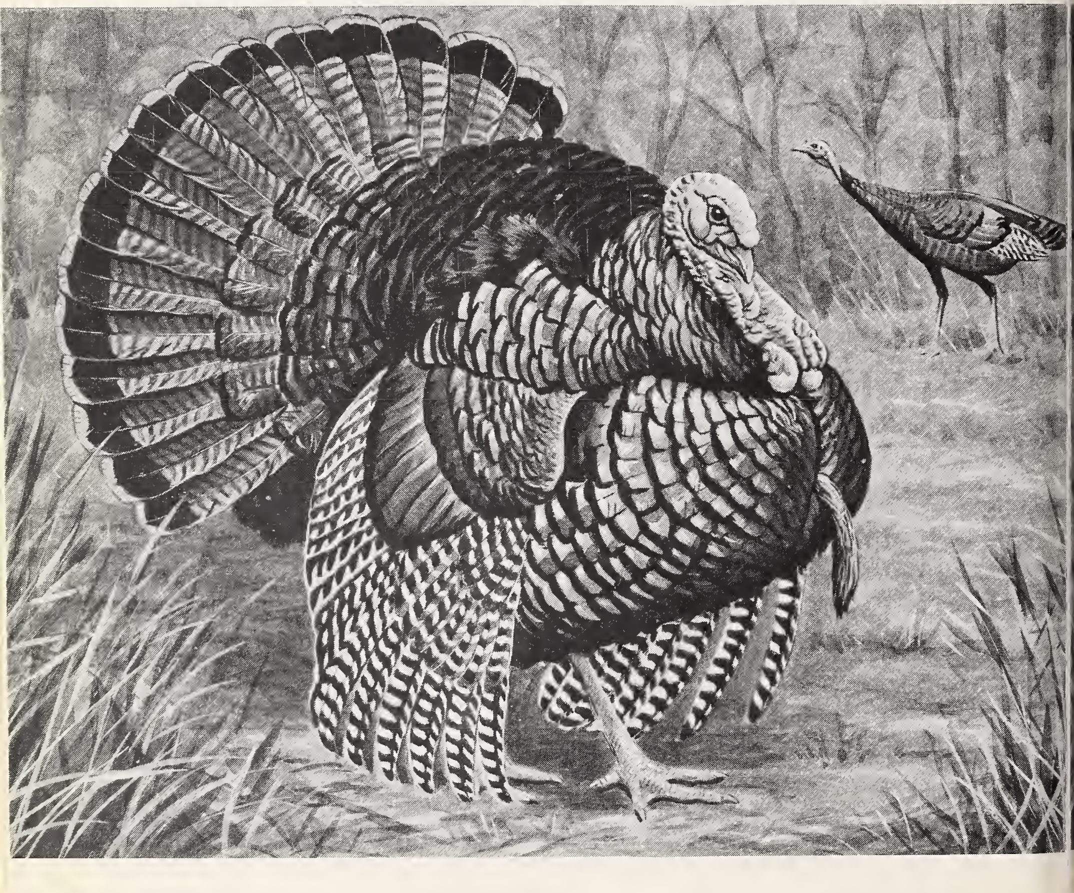
CBC members Adair and R. Connor Tedards, of Anderson, South Carolina, were among the 14 people invited to participate in the June 1964 expedition to band Sooty Terns on Bush Key, Dry Tortugas. Approximately 16,000 Sooty Tern chicks and 4,500 Sooty adults were banded on this trip to the remote islands 70 miles west of Key West, Florida. This particular nesting colony, part of the Fort Jefferson National Monument, is internationally famous as the only one for Sooty and Brown Noddy Terns in North America. A 15-year cooperative study is being made by the National Park Service, the Florida Audubon Society, and the Florida State Museum. Two trips are made each year, one in May to band adults and one in June to band adults and young. The colony, which at one time had declined to a few thousand birds, now harbors at least 100,000 Sooty Terns and more than 2,000 Noddies.

Much that has been unknown about these terns, especially the Sooty Tern, will gradually be revealed as a result of the banding. New longevity records for the species have already been established with the capture of more than 100 birds banded between 1937 and 1940. These, the band numbers disclose, were from 18 to 26 years of age when recaptured. Practically all had been banded as chicks.

It is still not known where these birds spend the winter. They disappear in September to appear over the Tortugas again late in the winter, or early spring. Meanwhile banded birds may have been carried by storm to Long Island, New York, to Massachusetts, Virginia, or Texas. [See General Field Notes in this issue.] Others have been found in the West Indies, in Central America, and South America. Half a dozen have been picked up in four countries in Africa. Some have flown aboard ships at sea. Gradually these wanderings are being charted. The background of the tern colony and its population and problems concerning it over the years appeared this year in booklet form, *The Terns of the Dry Tortugas,* by William B. Robertson, Jr., published by the Florida State Museum.

Our Wildlife Neighbors

The North Carolina Wildlife Resources Commission has recently revised its popular 48-page booklet *Our Wildlife Neighbors.* Dealing primarily with the important game mammals, the publication gives life histories of five game birds. In addition, the inside front cover is devoted to the Cardinal and the inside back cover to the Bald Eagle. Most of the illustrations are by Wallace Hughes, whose Turkey is reproduced below.



FINAL EASTERN BLUEBIRD REPORT: POLK COUNTY, NORTH CAROLINA—1963

C. T. DOWNER

In 1961 a population study of the Eastern Bluebird (*Sialia sialis*) was begun in Polk County, North Carolina, and a preliminary report was made following the 1962 nesting season (*Chat*, 27:35-36).

The 14 nesting boxes under observation produced 80 birds from 103 eggs, an average of 77% for 1962. The 1963 production from these 14 stations was 79 birds from 89 eggs, an average of 88%. This represents an 11% gain in the number of eggs producing young birds. Although the number of eggs laid was 23 less in 1963 than in 1962, the number of young birds hatched was only one less.

Only the Foy and Moore stations produced less eggs and birds in 1963 than in 1962. This resulted from unfavorable nesting conditions near the boxes. However, the production from these two stations was 69% in 1962 and 75% in 1963, a gain of 6%.

1964 NESTING SEASON

In 1964 the bluebirds nested in more boxes than during 1962 and 1963. Also, the fact that in some places the boxes were closer than 100 feet did not discourage a nesting pair (*Chat*, 27:76). Three reports have indicated three nestings of the same pair. One box I had under close observation showed the parent birds feeding the young as late as 7:30 PM during the month of July. One factor that appeared at first to be a bad sign for the 1964 nesting season was the cold spring in this area. However, after the weather began to warm up, the birds began to build their nests, and the population does not appear to have been adversely affected by the late start.

BLACK SNAKE AS PREDATOR

In my previous report (*Chat*, 27:35), I mentioned that I felt the black snake was a prime predator of the Eastern Bluebird. Now, after three years of close observation, I am convinced this reptile destroys many other species as well as the bluebird. Every possible means should be used to erect all nesting boxes so they will be safe from the black snake. Although it is virtually impossible to make a box completely safe from predators, the following suggestions will help reduce predation. (1) Avoid placing a box near a shrub or tree. (2) Place beneath each box a metal guard or baffle surrounding the supporting post or tree. (3) If a box is robbed repeatedly, change its location.

CONCLUSIONS

The Eastern Bluebird population is definitely on the increase in Polk County. The percentage of eggs producing young birds (77% in 1962 and 88% in 1963) indicates that the fertility of the eggs in this area has not been adversely affected by pesticides to any alarming degree. However, before the bluebird population can increase in any given area, suitable nesting sites must be provided.

ACKNOWLEDGEMENTS

The bluebird study in Polk County was made possible through the cooperation of many people in the Tryon area who allowed me to erect boxes on their property and visit these boxes at my convenience to gather data. This survey has generated tremendous interest which is still growing. Many, many thanks to all the nice folks who have written me with encouraging words. So far, comments have arrived from eight states, including Alaska. Thanks also to the Tryon Bird Club members who are distributing bluebird boxes and publicizing the need for erecting them.

Box 1441
Tryon, North Carolina
30 September 1964

NOTES ON SOME WATER BIRDS IN THE VICINITY OF CLEMSON, SOUTH CAROLINA

GASTON GAGE

Many of the bird records for the area around Clemson, South Carolina, were recorded by Franklin Sherman, a professor at Clemson College, and by his colleague and associate, George E. Hudson. These records are now on file in the School of Agriculture of Clemson College. Sherman worked on this project from the time he came to Clemson in the middle 1920s until his death in 1946. Hudson was here for a short time in the late twenties. These records by Sherman and Hudson are the basis for many of the western South Carolina records in *South Carolina Bird Life* by Sprunt and Chamberlain (1949).

During most of this time there were no large bodies of water in the area. The Keowee River and Twelve Mile River joined just west of Clemson to form the Seneca River, and the water in this area consisted almost entirely of these flowing streams. The Seneca River and the Keowee River form the boundary line between Pickens and Oconee Counties. These two counties make up the northwestern corner of South Carolina, Pickens being north and Oconee being west.

LAKE ISAQUEENA

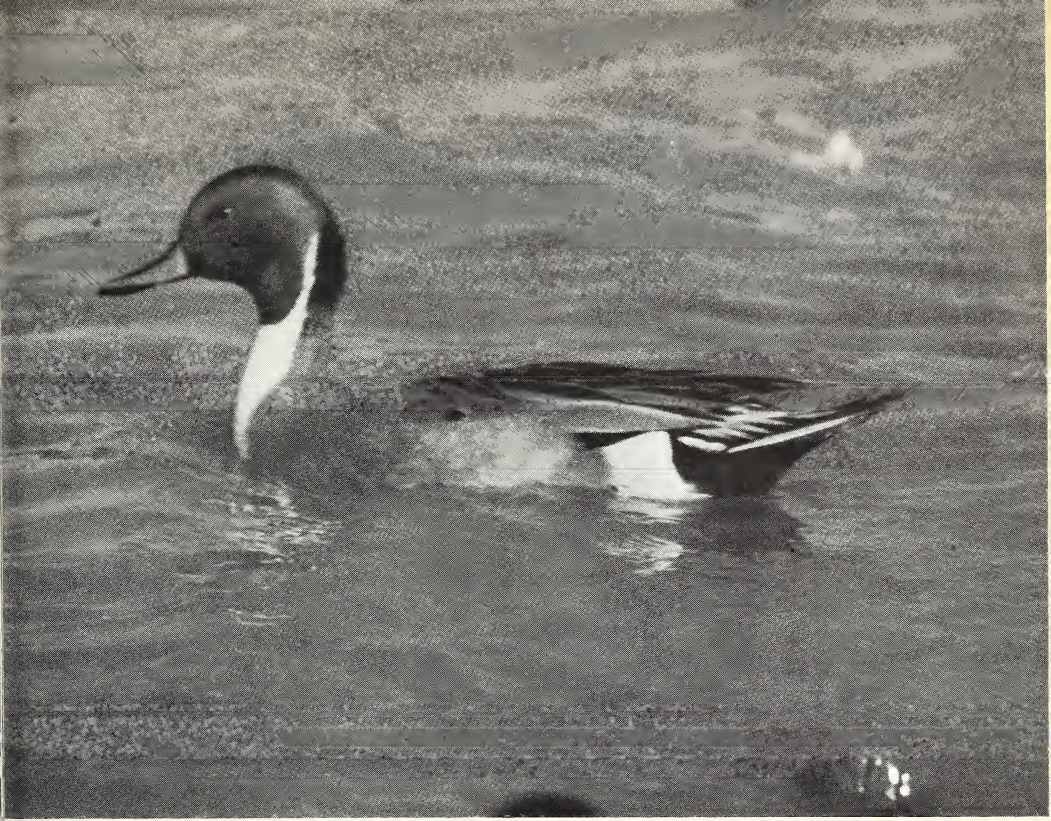
In 1935 the Federal government inaugurated a "resettlement project" in the neighborhood of Clemson College, buying up about 26,000 acres of land north and south of the College, much of it bordering on the Seneca and Keowee Rivers. In the area north of the College, Six Mile Creek, a tributary of the Keowee, was dammed to form Lake Isaqueena, which covers about 100 acres. Soon after Lake Isaqueena was built, the government lost interest in the resettlement project. As a result there was no management of any kind in the area and hunting was common on the land and on the lake. In 1950 these lands were turned over to Clemson College by the Federal government. Shortly thereafter the College inaugurated a game study in the area around Lake Isaqueena, at the same time stopping all hunting in the area and on the lake. The lake was closed to fishing in the winter months.

HARTWELL RESERVOIR

Soon after the resettlement project was turned over to the College, the Federal government began construction of a dam on the Savannah River. This dam was completed and the reservoir started to fill in 1961. It forms a lake which covers about 64,000 acres and has 1,000 miles of shore line. It backs water up the Seneca, Keowee and Twelve Mile Rivers to a depth of about 10 feet on the lower side of the Lake Isaqueena dam. This large lake is called Hartwell Reservoir.

STUDY BEGUN

My home is in Pickens County about one block from the shore of Hartwell Reservoir and less than a mile from Oconee County. In 1953 I started carrying a notebook in my pocket and jotting down what I saw in the bird world. I had recently acquired a copy of *South Carolina Bird Life* and Peterson's *A Field Guide to the Birds.* Soon after my wife and I started bird watching, we discovered the ducks on Lake Isaqueena. During the winter months we would drive out there—about 7 miles—once or twice a week to see what we could see. Over the years we have spent many pleasant hours at Isaqueena. We soon began seeing birds there which had not been reported from the Clemson area. It was readily apparent that the "new" birds were almost entirely those attracted by water. Undoubtedly



PINTAIL (Photo by Jack Potter)

the changed water situation is the reason we saw many species which had not been recorded by Sherman and Hudson. Also, during Sherman's life there was no protection for waterfowl on Lake Isaqueena; but when I started keeping notes, the lake had been closed to hunting for about three years.

RECORDS LISTED

The present list is confined to water birds recorded in the Clemson area during the past 10 years but not listed in *South Carolina Bird Life* as having been seen here. (A brief report of my water and land bird observations around Clemson appeared in the March 1958 *Chat*, p. 27-28.) These water attracted birds were seen on Lake Isaqueena, Hartwell Reservoir, and one or two small ponds in the same vicinity. Since Lake Isaqueena is in Pickens County about one-half mile from Oconee County and Hartwell Reservoir forms the boundary between the two counties in this area, it seems as if birds seen on either of these two bodies of water are apt to have visited both counties.

COMMON LOON. At least one seen almost every winter, four at one time in 1957. Have seen them in both winter and summer plumage. Heard one give its call 22 April 1957.

HORNED GREBE. One each year in 1956, 1957 and 1958. Three at one time on Hartwell Reservoir 3 January 1964.

DOUBLE-CRESTED CORMORANT. Two on 23 May 1955 and one seen again the next day. One on 24 June 1956.

YELLOW-CROWNED NIGHT HERON. One on Hartwell Reservoir 4 September 1961.

BLUE GOOSE. One 19 November 1953 and 22 November 1953 (same bird). One 30 October 1955. Both immatures.

GADWALL. Three to five almost every year. A flock of 40 on 10 October 1957.

PINTAIL. A few scattered through every winter, usually 15 or less. A flock of 125 on 24 February 1954.

BLUE-WINGED TEAL. A few every year. Usually seen in September and April.

AMERICAN WIDGEON. Flocks of from 10 to 50 every year, usually in late winter or early spring. A flock of 100 on 14 March 1954.

SHOVELER. One or two almost every year, mostly in spring. A flock of 25 on 3 March 1954.

BUFFLEHEAD. One or two each winter. Ten in one flock 24 November 1960.

WHITE-WINGED SCOTER. Only one seen, 29 March 1954. [This sight record is materially strengthened by the 12-day sojourn of an individual near Greenville, South Carolina, in March 1950 (*Chat*, 18:96, 1954).—Ed.]

RUDDY DUCK. Seen four years in ten. A flock of nine on 13 November 1956. Other years one to five at a time.

HOODED MERGANSER. One to four birds seen on 12 occasions. Several times seen on small ponds.

COMMON MERGANSER. About nine, mostly females, spent most of February and March on Lake Isaqueena in 1954. They would come in after sunset and leave before sunup. There were 40 on the lake 25 November 1955. One lone drake stayed on Isaqueena from 27 December 1955 to 12 February 1956, leaving in the daytime and coming in at sundown. Have seen one or two on several other occasions.

RED-BREASTED MERGANSER. Ten on 27 March 1954 and 25 on 24 November 1960. One or two seen at other times.

RING-BILLED GULL. Now common on Hartwell Reservoir, but had been seen before it was built.

COMMON TERN. One seen at close range sitting on a snag in Hartwell Reservoir 14 September 1962.

LEAST TERN. One seen on a small pond now covered by Hartwell Reservoir. Watched at close range 31 July 1954.

PEAK POPULATIONS

Examples of peak populations at Lake Isaqueena during spring and fall migration are worth noting:

22 March 1955—Pied-billed Grebe, 16; Mallard, 50; Black Duck, 6; Gadwall, 3; Pintail, 2; American Widgeon, 25; Shoveler, 1; Wood Duck, 5; Ring-necked Duck, 150; Scaup, 75; Bufflehead, 5; Red-breasted Merganser, 1; Coot, 8.

24 November 1960—Common Loon, 2; Mallard, 75; Black Duck, 20; Pintail, 25; American Widgeon, 25; Shoveler, 2; Redhead, 50; Ring-necked Duck, 20; Scaup, 10; Bufflehead, 10; Red-breasted Merganser, 25.

In the mid-winter months there is small variety but large numbers: 21 January 1956—Canada Goose, 15; Mallard, 1,000; Black Duck, 100; Ring-necked Duck, 300; Common Merganser, 1.

There have not been this many individuals on the lake in the last few years. In 1954 and for three or four years afterward we were feeding the waterfowl at Isaqueena. Since the feeding was stopped, the number has dropped off to where 200 Mallards and 100 Ring-Necked Ducks are about the most we see. Probably the construction of Hartwell Reservoir has scattered the ducks over a larger area making them more difficult to see.

This list of birds, most of which have not been reported previously from the Clemson area, in no way reflects on the work of others. It simply illustrates what changing environment will do to the bird population.

305 Edgewood Avenue
Clemson, South Carolina
23 April 1964

Backyard Birding

ANNIE RIVERS FAVER
Department Editor

He was brought to me May 16th, the only remnant of a Cardinal family, martyrs to a cat, his eyes not open, naked except for a line of dark fuzz over his head like a Mohawk indian and down his spine, as ugly a small creature as one could imagine. The young girl who brought him had kept him since the day before on a diet of milk, water with a medicine dropper and bread crumbs. Somewhere I have read that bread, tho relished, is low in food value for birds. I left off the water, doubting that parent birds include it, till a good bit later when he seemed to love it and would take quantities. I would like a comment on this, too, from someone who knows. I started with mashed hard boiled egg with a few drops of cod liver oil and a very little bacon fat—and then went to digging earthworms. It was the beginning of a drought and worms went deeper and deeper into the ground till it took a mattock to find them. That wasn't too bad, but the next step was—cutting them into practical lengths with scissors. The baby probably could have swallowed them whole if I could have poked them far enough down with the tweezers and if the worms had cooperated, but I couldn't and they didn't.

For a day or two I tried to feed every fifteen or twenty minutes and have now great sympathy for parent birds; then stretched the intervals to half an hour and soon to an hour or more. Catching insects isn't too practical for an ancient human and I didn't know which were digestible but did give him an occasional housefly when I could swat it. Wendell Smith, of North Wilkesboro, suggested hamburger which eased the pressure of worm digging but brought its own problem—the smallest tray of hamburger lasts a baby bird a very long time and I got tired of eating his left-overs till it occurred to me to roll it into tiny balls, each wrapped in waxed paper and kept in the freezer.

The bird was brought me in a nest which had had no mother to clean it for twenty-four hours. I transferred him to a recently vacated Song Sparrow nest lined with squares of Kleenex. The routine was like clockwork, a morsel, a swallow, and a squirt, then the top sheet of Kleenex was slid from under him and he was as neat as his mother could have kept him. I tried to handle him as little as possible tho he didn't seem to mind it.

Till his eyes opened the second day, a slight jar to the nest brought up his head with a jerk, mouth wide open; then that instinct seemed to lapse and I was in a panic, not knowing the sound—if any—a parent bird makes to signal food, till he learned that my hand above him meant meal time.

Once fairly well covered with feathers of a sort (you could see the growth from day to day) he began moving about, hopping to the edge of the nest, and finally to the floor of the cage. At first when put back into the nest he would stay awhile and for some little while would stay when put in at bedtime and the cage covered for the night. But not after he learned to hop onto the low perch, usually overshooting and landing with a plop on the floor.

When he began trying to fly there was another problem. My dog is a stray who decided to live with me and has no intention of allowing any rival for my attention. While the bird was tiny I held the nest down for the dog to sniff and get acquainted (with a tight grip on his collar), and he seemed only to want to lick it. His idea of playing would have done for the birdling with one slap of a paw and I didn't dare risk them alone. So the open cage was transferred to a small screened porch by the kitchen door, most inconvenient as the screen had to be kept latched and the kitchen door unused for several weeks till the baby could fly well enough to be turned out of doors. Once, after he was outside, I glanced thro a window and froze with horror at seeing him on the ground, the dog sniffing at his tail, but he hopped casually among some tall weeds and Mike turned away and paid no more attention. He did lose a tail and a half tho, other times, and I am inclined to blame Mike. His third tail is now (October) almost grown again. Whether it was from being handled, or his diet, he looked sadly moth-eaten, a great contrast to the sleek cardinals his age brought up by proper parents outdoors, but he is growing fairly sleek himself now.

Another milestone was passed about the time he tried to fly when he began trying to pick up food for himself, for encouragement then I added canary seed and fine cracked corn and gradually left off the earthworms.

Able to fly fairly well and to feed himself, he couldn't be kept in the porch any longer—I sympathize with human parents of a sixteen-year-old with a new driver's license, but propped open the screen door and took him out and in on my finger several times to learn the way. Inevitably the porch had to be scrubbed so his table with the open cage and food was moved out to a sheltered corner.

By that time with his beak starting to turn red, his primaries, tail feathers and little crest reddish, and a wash of golden brown over his breast, it began to be evident we would have to stop calling him 'he' and now are definitely saying 'she'.

She is still quite tame, talks in soft little chirps when I pass nearby and once in a while (not often) if hungry she will fly to me. When I hold food a few inches out of reach she hops on my hand and has no objection to being carried about—till the dog sees us and comes with a bound. Until the last few days dog food was her favorite and she would leave whatever she was eating and hop on my hand, then a couple of days ago I started with sunflower seed and wild bird mixture and now when I offer her dog food she looks annoyed, hops over and takes one bite for manners, then goes back to her seed. With the fresh diet on her table the nuthatches, chickadees and titmice have found it. Awhile ago I went out and a pair of titmice kept circling over my head, scolding; I believe with time and patience they would come down and feed while I stand there.

Mr. Smith banded my bird, so I can always recognize her, if she lives and is still tame next mating season I will send another report.

MARGARET HARPER, *Box 673, Lenoir, N. C.*

Bird Anting at Many Maples

It was bright daylight on this August morning as I sat at my den window, drank my coffee and watched. Eight-o-clock coffee tastes best at 5:30 AM. One bird bath is in full view, just 30 feet from where I sit and watch every thing that takes place on the lawn during these early morning hours. For years there has been an ant hill on the ground just a few feet away from the bird bath. They are the ordinary variety of garden ants that burrow in the ground and bring to the surface little pellets of earth.

On this Monday morning, August third, there was little activity on our lawn, so I gave my undivided attention to a lone Robin that was acting queerly. He was scratching in the ground, close to the bird bath, just like a chicken does. This in itself was unusual, so I watched with interest. I saw him peck in the ground at his feet and apparently pick up something in his beak. To my surprise, he preened himself under one wing. Then he shook himself—flapped his feathers and for a brief instant stood motionless, as if enjoying himself. Again he pecked the ground, arched his neck as before and preened himself under the same wing. Through my field glasses I watched his every motion. These motions were so fast I was never actually able to see an ant in his beak.

How many times it repeated this performance, I do not know. I was too interested in watching the bird to count the times. The light of the rising sun was behind it, so I never determined the sex. As soon as he left I went to the spot where he had been standing. The ants were there, all right. Two were tugging at a third that evidently was dead or had been badly hurt. I got out my book, *Animal Wonder World,* by Frank Lane, and read again the chapter on the "Mystery of Bird-Anting." Everything fitted perfectly with his description.

LEEMING GRIMSHAWE, *Flat Rock, N. C.*

Room and Board for Birds of Prey

For years the neighbors have worried about me because I was interested in birds but didn't have a parakeet. They were greatly relieved last fall when the Potters at long last obtained a pet bird, a handsome young male Sparrow Hawk. The neighborhood children soon made friends with the falcon and visited him regularly, but they never fully accepted the fact that we did not give him a name. Oh, we tried to name him, but our ideas all seemed inadequate compared to the colloquial Kitty Hawk and the falconer's Kestrel.

My husband's uncle, Barrie Davis, found the hawk standing in the middle of a country road October 29, 1963. Curious about its identity and realizing that the bird would most likely die because it was unable to fly, he brought the hawk to me wrapped in a jacket. Released from the jacket, the bird spread his wings and ran for cover under the lowest piece of furniture in the living room. Retrieved and examined for injuries, the hawk showed no sign of broken bones or a gunshot wound. Missing feathers on the breast and his inability to fly indicated the probability of a massive bruise on the pectoral muscles. Having recently met an enthusiastic falconer, Dr. H. Koepp-Baker of Carbondale, Illinois, I agreed to care for the little falcon. I do not think we could have kept the bird alive without Dr. Koepp-Baker's expert advice and the food supplement he supplied.

Basically a captive hawk needs only a perch and raw lean meat once a day. It is desirable to keep the bird outside or in an unheated room if at all possible. When one tries to keep a raptor in a heated house with four children and their friends constantly going in and out, matters become a bit complicated.

The first perch we tried was a short length of fence post nailed to a piece of plywood to keep it upright. The top of the post was covered with soft leather. A soft leather strap called a jess was placed around each tarsus. The jesses were fastened to the perch by a swivel catch and a short piece of fishing line. This portable perch was easily cleaned, but the hawk did not like it. He was extremely restless, constantly turning round and round on the perch. At every opportunity he slipped his jesses and flew to the highest perch he could reach. Here he would give a triumphant call and wag his tail contentedly. Finally we decided to nail a small tree branch to the top of a window frame in the utility room. Here the bird would stay for days at a time without visiting other parts of the house even though the jesses had been removed.

Fortunately the boys had a pet mouse which they gladly offered the hawk for his first meal with us. We put the bird and the mouse in a box together and closed the lid. In a few moments the hawk was dining on mouse. Once the bird had a full crop, it was possible to handle him enough to prepare him for subsequent hand feedings.

Beef liver and beef kidney cut into ¼ inch cubes were readily accepted by the hawk. Soon he was making short flights—4 or 5 feet—to my hand for feedings. Then he seemed to grow weaker and began to sleep nearly all the time. At this point I wrote Dr. Koepp-Baker for help. Also I did some independent thinking. Although I had read that hawks do not need water because they get plenty of liquid in their food, I decided that the bird might be dehydrated and forced him to drink some water.

Dr. Koepp-Baker confirmed my opinion about the need for water. He said that wild birds do not need water nor do healthy captive birds which are kept outside; but birds kept in heated houses and sick or injured birds might need water occasionally. He also said that the bird absolutely must have muscle tissue even though it preferred liver and kidney, and he sent a food supplement called Que-Ess. Although I was unable to find Que-Ess in the Raleigh area, I did find Squibb's Vionate, a veterinary vitamin-mineral powder for small pets. These supplements were sprinkled on the food, which was allowed to stand until the powder absorbed enough moisture to keep it from getting in the bird's nares.

As the hawk gained strength, I began giving him his food in thin strips and later in mouse-sized chunks. His ability to tear apart his food and his lengthening flights about the house told us that the time to release him was approaching. We began handling him only when necessary.

Early February brought signs of the prenuptial molt. When he first came, the bird had a poorly defined red cap, fairly large spots on his breast, and rather heavy barring on his back. The new feathers were more finely marked. We thought he would obtain the fully adult male plumage during the molt, and we wanted to keep him long enough to see the transformation. However, we had seen how battered his old primaries had become in captivity and did not want his new plumage to be damaged; so the morning of February 22, 1964, we released our little falcon.

The bird flew to the top of the apple tree on unsteady wings. We wondered if we had released him too soon, but he gave a triumphant cry and wagged his tail. He flew to the top of the pecan tree, paused a moment, and then flew northeast—strong and free.

Of course we were glad the Sparrow Hawk had recovered, but we missed him. Each morning when I opened the refrigerator door, I half expected to hear his hungry cry. Each time I walked into the utility room, I half expected to hear him flap his wings.

Three months later, May 18, Mrs. Vera Rhodes called me to report an owl standing under her picnic table. Upon investigation my husband and I discovered a nestling Screech Owl under the table and another slightly older nestling in an overhanging branch of a tree. Mrs. Rhodes told us workmen remodeling her home had removed an unused chimney that day. She had scattered some trash from the chimney in her flower bed. We examined the material, which was predominantly pine needles. Among the pine needles were several bird feathers, including one which appeared to be from the tail of an Evening Grosbeak. We searched the trees and out buildings for the parent birds and concluded that the nestlings had been abandoned.

Mrs. Rhodes' daughter took the older baby Screech Owl, and we took the younger, which was promptly named Howie the Owie. The bird appeared to be about three weeks old. Its head and body were covered with gray fur-like feathers with tiny tufts of natal down still attached to the tips.

HOWIE (Photo by Fred L. Johns)

The wing and tail primaries had burst their sheaths but were still so short that the bird could not fly.

Following a first meal of dog food (hastily borrowed from a neighbor), Howie received generally the same care that proved satisfactory for the Sparrow Hawk. Strips of raw beef liver and lean stew beef were treated with Vionate and offered at alternate meals. We discovered one big difference between the two raptors: Howie loved water, which he drank nicely from a cup. Also Howie gulped down huge amounts of meat in just a few moments instead of tearing off small bits as did the hawk.

One day I found Howie stretched out breast down on the floor of his cage. I thought he was dead; but when I opened the door, he pulled himself upright without even flapping his wings. He must have been sleeping. On other occasions I found him in the same position or leaning at about a 45° angle forward or to one side.

Howie was a delightful pet. He enjoyed being stroked, and during the three weeks we kept him he never nipped anyone; but he often frightened strangers with a bill snapping performance. One day Howie went to school and was petted by every child in four different classrooms without becoming irritable. In fact while he was being stroked, he seemed to be hypnotized and completely unafraid of the excited children. The teachers and I used Howie's trip to school as an opportunity to teach a conservation lesson about the usefulness of hawks and owls.

Knowing that Howie could not learn to hunt without a supply of living prey, we regretfully turned him over to Fred Johns, a graduate student in the Zoology Department at N. C. State. Fred heard Howie practice his calls and saw him capture mice in a dimly lighted room. At last report Howie was a normal young Screech Owl fully ready to fend for himself in the wild.

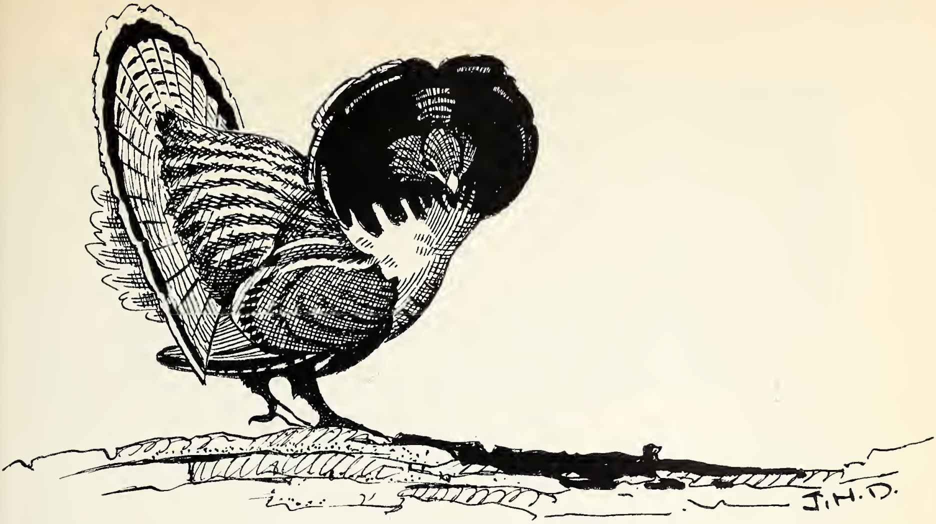
Our experiences with the Sparrow Hawk and the Screech Owl have convinced us that small birds of prey make interesting pets; but the nicest thing about keeping raptors in our home was seeing our friends' curiosity turn into genuine admiration for Nature's flying mouse traps.

ELOISE F. POTTER, *Box 487, Zebulon, N. C.*

From the Log of Critter Rest

2 September 1964.—At about eight o'clock this morning a group of 75 or more Common Grackles dropped on our south lawn and began to give it a good going over. The birds were rather thinly spread—perhaps one to the square yard—and they moved leisurely in a body toward the west. Yesterday, after a try at shrimp, I had cast my net on the open lawn to dry and it lay in the path of some of the foraging grackles, covering a circular area some seven feet across. I was amused at watching the birds avoid the net as they reached it by casually walking around it and closing ranks as they passed it. The netting is a dirty white and while it was obviously conspicuous to the birds, it certainly presented no physical barrier to them, yet none of them stepped on it.

B. R. CHAMBERLAIN, *Wadmalaw Island, S. C.*



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

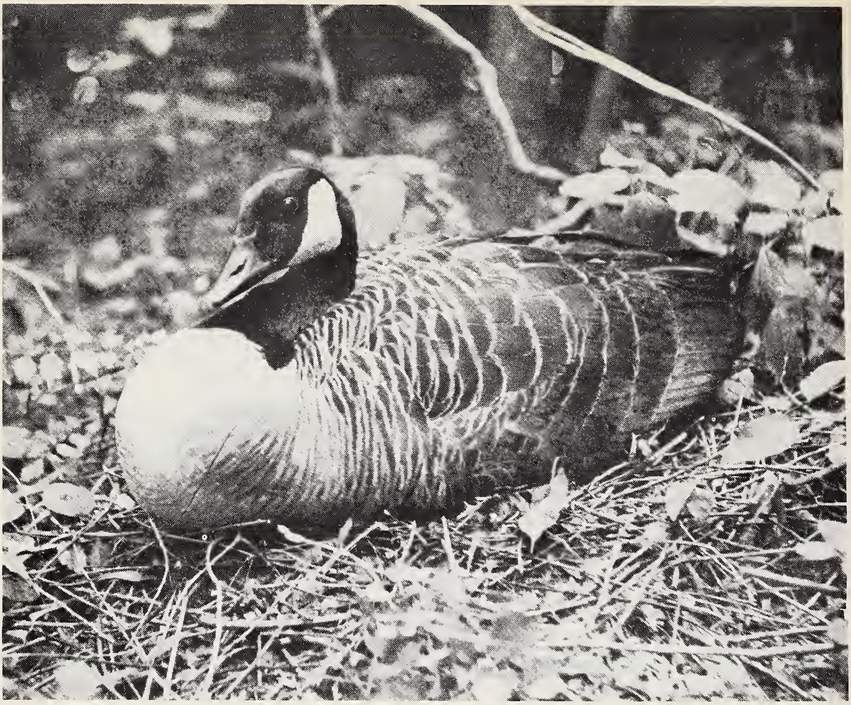
This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Wilson's Petrel at Hilton Head Island, South Carolina.—On 10 September 1964, during the passage of hurricane Dora, I saw a Wilson's Petrel (*Oceanites oceanicus*) from our beach on Hilton Head Island, Beaufort County, South Carolina. I am familiar with the bird from trips to Jamaica. Watching with glasses, I saw the small size, peculiar flight, white rump-patch, and square tail—with the feet sticking out beyond it.

Our house is directly on the beach, and we stayed in it throughout the hurricane. Luckily, there was no real damage except to our sea wall.—CAROLINE NEWHALL, *North Forest Beach, Hilton Head Island, South Carolina, 11 September 1964.* (U. S. Weather Bureau records for Charleston for September 1964 contain the following statement relative to the approach of hurricane Dora, 9 and 10 September: "sustained high onshore winds, heavy surf; winds continuously exceeded 20 MPH for 49 hrs. & 30 MPH for 12 hrs."—*Dept. Ed.*)

Nesting Record for the Canada Goose in Wake County, North Carolina.—There are at least four documented records of the Canada Goose (*Branta canadensis*) nesting in the Carolinas. These are: two at Spartanburg, South Carolina (Cannon, 1950 and 1952); one "near Long Creek Lodge" in Surry County, North Carolina (N. C. Dept. of C. & D., 1944); and one at Gaddy's Goose Refuge in Anson County, North Carolina (Gaddy, 1943). It should be noted that in the Anson County record it is probable that one parent, if not both, was captive. A fifth record was added on 30 April 1964, when James F. Parnell and I found a single nesting female at Lake Raleigh in Wake County, North Carolina.

The nest was located on a narrow finger of land about 75 yards long, which projected into the lake from the northeast shore. The finger was



Female Canada Goose incubates four eggs in a nest located at Lake Raleigh, Wake County, N. C. (Photo by Fred L. Johns)

bisected lengthwise by a small creek, with the nest on the northernmost side some 20 yards from the point. Willow (*Salix nigra*) and Alder (*Alnus serrulata*) formed a dome-shaped canopy extending across the peninsula and ranging up to 15 feet in height. Vegetation inside the canopy was sparse and the nest was exposed to full view, although it could not be seen at all from outside the canopy. The nest was on the ground in a sparse stand of poison oak (*Rhus*, sp.), less than 1 foot above the high-water level. It was some 10 feet from the lake shore on one side and 4 feet from the creek on the other. The nest was composed of small, dead twigs. It was approximately 14 to 16 inches in outside diameter, 12 inches inside diameter, and 3 inches from ground level to the upper edge. A light coat of gray down lined the nest and was used to cover the eggs when the female was away.

Incubation was already in progress on the morning that the nest was discovered. The bird was provoked into rising off the nest only enough to satisfy the observers that eggs were definitely present. The broken, empty shell of one egg, apparently destroyed by a predator, was found about 15 feet from the nest. The nest was visited on 21 different days during the succeeding 33-day period, usually by myself but sometimes by Dr. Parnell or Fred L. Johns. On most visits the goose was on the nest. On 11 and 14 May, however, the goose was away when I approached. It was then determined that there were four eggs in the nest. The eggs had been carefully covered with down and were warm. On both of these visits the goose returned, flying, within moments of my arrival. Honking strongly, she unhesitatingly rushed into an aggressive threat display with wings spread, head extended, and bill open. As soon as I retreated some 15 to 20 feet from the nest, the threat display stopped and the goose resumed incubation. On 26 May the goose was again away when I visited the nest; the eggs were noticeably colder than before. The nest was examined and photographed for more than 20 minutes before the goose arrived. She performed the threat display, although it was not nearly so dramatic as on the previous visits, and then settled on the eggs. On 27 May this performance was repeated. On 28 May the goose came near the observer, hissing and honking, but she did not go near the nest. One very putrid egg, later proved to be infertile, was collected. The nest was last visited on 2 June. The goose was heard about 50 to 60 yards away, but she did not approach the nest. Two eggs—one putrid and one fresh, both of which were infertile—had been destroyed by predators. The third and last egg was collected, and it too was later proved to be infertile. Incubation had apparently ended on 26 May, the twenty-eighth day of observation.

The actions of this goose at Lake Raleigh represent a nesting attempt some 500 miles to the south of the normal breeding range for the species. No gander was seen or heard during the entire period. There are no known reports of domesticated geese in the Lake Raleigh area. The bird was apparently uninjured, for she was seen in flight on 11 and 14 May. She incubated at least up to and probably beyond the required period of 28 to 30 days, but all four incubated eggs were determined to be infertile. The nesting record reported here is indeed unusual, first because of its presence, and second because of the fact that a clutch of infertile eggs was laid and incubated for the full incubation period. The circumstances leading up to this unusual record, especially the possibilities of a deceased mate or unsuccessful mating attempt, are open to speculation and can not be determined.

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JAMES H. HUNT, *Department of Zoology, North Carolina State of the University of North Carolina at Raleigh, 9 July 1964.*

An August Sighting of the Common Scoter at Hilton Head Island, South Carolina.—On 11 August 1964, Frank Wilson, Mildred Lawrence, and I saw three male Common Scoters (*Oidemia nigra*) at Hilton Head Island, Beaufort County, South Carolina. There was a moderate surf and the birds were swimming just beyond the breakers at distances varying between 200 and 500 feet from us. We watched them with glasses over a period of about two hours, but we did not see them fly. They appeared to be fully adult males with the orange "swelling" at the base of the bill very conspicuous.

The wind was from the northeast and gusty, but there had been no really hard blow. We first sighted the Scoters at about 4:00 PM. Earlier there had been some rain, but by that time it was clear. I believe there is no previous record of the occurrence of the Common Scoter on the South Carolina coast so early in the fall.—MRS. CAROLINE NEWHALL, *North Forest Beach, Hilton Head Island, South Carolina, 1 September 1964.*

Long-billed Curlew at Oregon Inlet, North Carolina.—At 9:00 AM on 4 September 1964, I parked near the Oregon Inlet Marina on the Outer Banks of Dare County, North Carolina, and walked north on the highway to examine flocks of peeps in puddles left by the heavy rains of 30-31 August. Next, I worked west on the dune crest and found that the channels in the sound-side marshes had many shore birds, gulls, and terns. After checking the birds within 50 yards, I began examining the further reaches and suddenly found myself looking at a Long-billed Curlew (*Numenius americanus*). For about five minutes I examined the bird in detail, checking it in both Peterson and Pough. I then moved to within 50 yards of the bird and examined it in perfect light by Balscope, using 15X, 30X, and 60X lens.

The bird stood quietly beside a reed bed, and I endeavored to check the bill length by counting the reed-stems just beyond it. Two such attempts showed a bill length of not less than five times the length of the head. The upper mandible was dark blackish-brown except at the base. The basal third of the lower mandible was orange-brown. There was no vestige of striping on the head. A pale area near the bill-base spread toward the eye, widening to create a small, poorly-defined "eye patch." The legs were light gray. When the bird stood in the water, the gray had a noticeably bluish cast. Body plumage markings agreed closely with those shown in the *Audubon Water Bird Guide*. The general color was warm tan.

After allowing me at least 10 minutes of close observation, the curlew flew 100 yards further to a sandbar crowded with shore birds, gulls, terns, and perhaps 30 Black Skimmers. As it alighted it held its wings erect for a moment and the bright cinnamon color fairly shown in the sunlight. It remained on the bar for about 15 minutes and then flew off to the sound and out of sight.

The next day I returned at about 9:30 AM with two other birders, and we again found the curlew and the skimmers on the sandbar. We worked to within 100 yards and had close views for at least 10 minutes before it moved out to a more distant mudbar where it remained and was still feeding and moving about when we left some 30 minutes later. Incidentally, we counted 11 Sandwich Terns on the sandbar. My two "witnesses" were Miss Marcia Lakeman and Miss Marcia Nelson of Fairfax, Virginia, members of the Audubon Naturalist Society of the Middle Atlantic States, Washington, D. C.

I checked the Oregon Inlet area again on 6, 7, and 8 September but could not locate the Long-billed Curlew again.—CARL W. CARLSON, *5706 Lone Oak Drive, Bethesda, Maryland, 23 September 1964.*

Shore Birding at the Wright Brothers' Monument, Kitty Hawk, North Carolina.—On Sunday, 6 September 1964, an E to EbNE wind of 12 knots set in along the Outer Banks of North Carolina. A stationary front to the south kept the weather pattern in place and the wind blew steadily. When we left at noon on 10 September it was still blowing.

Birding from Nags Head to Pea Island went from poor to worse. On Tuesday afternoon it occurred to me that the east wind might be pushing Golden Plovers in from the sea. Wondering where a plover would go, I thought of the broad grassy areas at the Wright Brothers' Monument, so my wife and I drove over.

As we entered the grounds we found a dozen Killdeer feeding in the grass. Along the road circling the monument hill I found a flock of eight Semipalmated Plovers, one Least Sandpiper, and—of all things, feeding there on the grass—one Wilson's Plover. I examined the birds with the Balscope (15X) at 50 feet, and while I was watching them a flock of nine Golden Plovers flew over. They alighted on the far side of the hill, so we drove around for close views. Several of them still retained most of their breeding plumage. While flying, they showed the gray axillars and enough summer plumage to make them appear almost uniformly dusky.

We drove to within 100 feet of them and watched them with the Balscope (15X and 30X). Four of the plovers apparently had not begun to molt and the black underside reached to the tail with little or no mottling; the others retained much of this black feathering to the tail.

On the following afternoon we returned to the monument, and I scoped the runway area and found thirteen Golden Plovers and, with them, nine Black-bellied Plovers. Compared with the Goldens, the Black-bellies could be distinguished easily by the eye alone at some distance because of the far greater black-white contrast in the upper plumage of the Black-bellied Plovers. With these birds on the runway there was a scattering of Semipalmated Plover and Killdeer, eleven Pectoral Sandpipers and one Upland Plover.

This good luck led me to make a last visit to the monument grounds at 8:30 on Thursday morning, on our way home. The mixed flock was on the runway, but when I checked out the scattered birds I found a Buff-breasted Sandpiper among the Pectorals, with the Upland Plover nearby for direct comparison. I got to within 75 feet of it and examined it closely with the Balscope. The bill was short and thin, looking rather like a phalarope's bill. The head was small and very round, while the extended neck looked extremely thin. In comparison, the near-by Pectorals seemed almost coarse. The back and wings were dark brown in general, but the feathers were edged in a light warm tan, which gave a strongly scaled appearance. The color was warmer than that of the Uppie; the back seemed darker, though this probably was due to the marked contrast with the buff of the breast and sides. There were no "lines" on the back like those of the Pectorals. While the delicate bill, head and neck, seemed almost enough to identify the Buff-breasted Sandpiper, the most evident field mark was the warm, rich buff that spread over the face and down the throat, extending to the tail. Slight spotting at the sides of the throat and the yellowish legs also were clearly seen.

After my wife and I had watched this bird for some minutes and compared it to the plates in Peterson and Pough (see especially Plate 32 in Peterson's Western Guide), I flushed it and saw the contrasting whitish wing linings. It flew perhaps 50 feet and ran among the Pectorals where I found that I could pick it out readily by eye alone, looking for the delicate structure of head and neck, and the oddly erect posture.

This remarkable variety of birds at the monument must be attributed, I believe, equally to the long continued east wind and to the broad, green areas of well-kept grass so in contrast to the usual sand and brush of the Outer Banks. Birders in the area who encounter such winds will, I hope, try the monument grounds, particularly in the opening and closing hours when fewer visitors are present.—CARL W. CARLSON, *5706 Lone Oak Drive, Bethesda, Maryland, 5 October 1964.*

Buff-breasted Sandpiper in the Wilmington Area.—On 7 September 1964 I saw what I believe was a Buff-breasted Sandpiper (*Tryngites subruficollis*). I watched it for about half an hour, starting around 5:00 PM, at Rich Inlet, New Hanover County, North Carolina. The general appearance was that of a sandpiper about the size of a Sanderling, with a buffy head and breast, whitish belly, and yellowish legs. No white showed in flight except for the under-side of the wings. It was with Sanderlings part of the time and was carefully compared with them for size and possible peculiar effects of lighting.

In more detail, it was about the same length as the nearby Sanderlings but slightly taller. The sides of its head were quite buffy with a light circular patch around the eye. The patch did not contrast sharply with the color of the rest of the head. At one angle only there appeared to be a light streak behind the eye, disappearing in better light and at better angles. The bird's chin, chest, and breast were delicate buff, shading imperceptibly into whitish from the legs back. There was no evident spotting or streaking on the underparts. Its back was scaled, and the scales were arranged in streaks which were evident when the bird was viewed from behind. In flight there was no wingstripe, no white rump-patch, and no conspicuous white sides to the tail, which appeared to be narrowly edged with dark buff. The under-side of the wings was whitish, contrasting sharply with the breast. The bill was dark; the legs yellowish. The head was held high and the neck appeared thin.

Elliot Coues, in *Key to the North American Birds*, 6th ed. 1927, records "fall plumage: Under parts less rufescent [than in spring], frequently tawny-whitish," and Pearson says in *Birds of America*, 1944, that adults in winter have "whiter" underparts than they have in spring.

It would seem, therefore, that there can be no objection to identifying this bird as the Buff-breasted Sandpiper, especially since the other marks recorded fit this species exactly. The flight pattern in particular is distinct.

Apparently, published records of the Buff-breasted Sandpiper in North Carolina are confined to (1), 3 taken in Currituck County, 12 September 1911, and 6 seen there, 14 September 1911 by F. W. Koble (*Birds of North Carolina*) and (2), 2 seen at Ocracoke, 17 September 1957 by M. T. Griffin and Paul W. Sykes (*Chat*, 21:89, 1957).—MAURICE BARNHILL, *Stanford University, Physics Dept., Stanford, California, 15 September 1964.*

Sooty Terns Driven to Land by Hurricane Cleo.—Hurricane Cleo moved inland along the coast of Georgia and South Carolina. The advance northeast winds reached the lower South Carolina coast in gale force on 28 August (1964) and shifted to southeast in the early hours of the 29th. A maximum peak of 57 mph was reached at the Charleston Weather Bureau at about 1 AM on that date.

This sustained onshore gale must have driven many ocean birds before it. One species, seldom forced in as near as our beaches, was the Sooty Tern (*Sterna fuscata*). Considerable numbers of these birds must have been victims of Hurricane Cleo. Three were picked up and another was watched in flight at widely scattered points on the lower South Carolina coast by people with sufficient interest to report them.

From Hilton Head Island, Beaufort County, Caroline Newhall reported that Frank Wilson had discovered a live Sooty Tern on a walkway to the beach on the afternoon of 29 August. She and Mildred Lawrence tried to feed it; but it died and she sent it to Ivan Tomkins. He has kindly given me the following information: "It was a male in the 'young' aspect pictured in Peterson's Eastern Manual. The skull was well ossified and the testes well formed. . . . [I believe] it was fledged about 1963—not 1964, though in the tropics breeding is early. . . . It weighed only 112.85 gm."

A bit higher up the coast, Paul Atwood, at Edisto Beach, had a prolonged and very close view of a Sooty Tern in flight on 29 August. It seems likely that this bird eventually survived and returned to sea.

At Sullivan's Island, just north of Charleston, Peter Manigault found "a badly torn up body . . . on the beach. In spite of the condition, [he is] confident from the bill and from what could be seen of the color pattern that it was a Sooty." This bird probably came in on 29 August just as the others did, although it was not found until the second week of September.

On the Isle-of-Palms, a few miles farther up the coast, Teague Coleman and his wife found a dead Sooty Tern on a roadside just back of the beach. This was at about noon on 29 August. The bird was quite fresh. The plumage was bedraggled; only one of the white feathers remained in tail. E. Burnham Chamberlain examined this bird a few days after it was found. It was a male in poor condition. The weight: 132.71 gm.—B. R. CHAMBERLAIN, *Wadmalaw Island, South Carolina, 15 October 1964.*

Scissor-tailed Flycatcher Again at Wilmington.—On 5 June 1964, Jack McCarley, owner of the Echo Dairy Farm, on the Carolina Beach Road near Wilmington, North Carolina, found a Scissor-tailed Flycatcher

(*Muscivora forficata*) again at his farm. The first occurrence there was 1 June 1961 (*Chat*, 25:69, 1961).

This year (1964) the bird remained in the farm area at least through 7 June. It perched on the stubble of a freshly plowed field, but it was not seen perched on fence wires as in the 1961 occurrence. When disturbed, it would fly to the top of a high pine tree nearby.—MRS. DOROTHY EARLE, *Route 3, Box 255, Wilmington, North Carolina, 31 July 1964.*

Some Distribution Records from the Outer Banks of North Carolina Through Mist-netting.—After reading the account of mist-netting on North Carolina's Outer Banks in the March 1964 *Chat* (Hailman and Hatch, *The Chat* 28:28-29, 1964), it appears to me that my banding records over the past several years in that area should be helpful in bolstering the distribution data now available. I have made several banding trips to the North Carolina Outer Banks with my family, mostly in cooperation with the Operation Recovery Program.

The sites selected for our nets have been at Kitty Hawk, at Duck, and at the Sound-side Subdivision located about halfway between these tiny communities. For reference purposes, the results of the several trips are presented here pooled and listed by species. Excepting the capture of the Clay-colored Sparrow which I recorded in *The Chat* (28:98, 1964), they have not been previously published.

On our first banding trip to the Outer Banks, 11-15 September 1956, I set up several nets around a pond surrounded by dense thickets and dunes one mile north of the Kitty Hawk Pier and also along the wooded area near the Dare County Elementary School. The weather was warm, sunny with a southerly breeze. Few birds were seen, and our banding efforts were disappointing. Seventeen birds of 13 species were caught at these two sites.

On our second Operation Recovery attempt we set up 3 nets near the Elementary School in the afternoon of 28 September 1959. Heavy rain and strong winds from an advancing hurricane forced us to abandon the project in the mid-morning of the 29th. We caught but 9 birds of 7 species. On 15 June 1960, in a very brief period of netting at Duck, we captured 4 birds of 3 species; and in November of that year the weather again halted our efforts with a combination of rain, sleet and hail. Three nets were set up near the lagoon in the Sound-side Development northeast of the Kitty Hawk Pier on the morning of 6 November and taken down on the morning of the 7th. The catch here numbered 12 birds of 6 species. Back at this same site in June of 1961, we caught 23 birds of 6 species. Among them were 14 Prothonotary Warblers.

On the afternoon of 25 September 1961, and for a very short time in the following morning, at Duck, in a location protected from the NW wind of 12-15 mph, we netted 27 birds of 12 species in 18 net-hours. This was my first banding experience at Duck. A hurricane had passed several days before and on the 26th, the wind changed and there were very few birds around when we took our nets down.

In the fall of 1963 we were again at Duck and on 18, 19, and briefly on 20 September we succeeded in netting 34 birds of 14 species. It was on this trip that we captured the Clay-colored Sparrow previously mentioned. Also on this trip we caught a Least Flycatcher. This was the second Least we had netted at Duck. On 25 September 1961 we had caught a Least and a Traill's Flycatcher.

I always take measurement of wing-chord, wing tip, nostril to tip of bill, and width of bill at gape, if necessary to support my identification of the *empidonax* flycatchers. Since techniques differ, I follow the instructions issued by the Banding Office at Patuxent, Maryland, for the sake of uniformity. Personally, I find that the width of the bill is one of the measurements most useful to me in separating the Least from Traill's. Since I began banding I have banded 18 Traill's, 35 Least, and 4 Acadian Flycatchers. I have also banded 78 Eastern Wood Pewees, 35 Phoebes, and a number of the larger flycatchers.

The following is a consolidated listing of the 42 species of small land birds that we have netted, banded and released in the Duck-Kitty Hawk area of the Outer Banks, and 12 additional species that eluded our nets. Age, sex, and fat index are indicated where they were determined. Symbols are: A for adult; S for sub-adult; I for immature. For fat deposition: classes from 0 (none) through 3 (heavy) are as prescribed by the Eastern Bird-banding Association (1962). For specific sites: D for Duck; K for Kitty Hawk; D-K for the Sound-side Development between Duck and Kitty Hawk. All measurements are given in millimeters.

Species	No.	Date	Area	Age	Sex	Fat	Wing Chord	Remarks
Cuckoo, Yellow-billed	1	18 Sept. '63	D	—	—	0	140	Molting
" " "	1	19 Sept. '63	D	—	—	1	144	Tail worn
Flicker, Yellow-shafted	1	25 Sept. '61	D	—	—	—	150	Mustache
" " "	3	18 Sept. '63	D	—	—	—	—	Observed
Woodpecker, Pileated	2	19 June '61	D-K	—	—	—	—	"
" Red-headed	2	19 June '61	D-K	A	—	—	—	"
" "	2	19 Sept. '63	D	A	—	—	—	"
" Downy	1	19 June '61	D-K	—	—	—	—	"
Kingbird, Eastern	3	20 Sept. '63	D	—	—	—	—	"
Phoebe, Eastern	1	7 Nov. '60	D-K	—	—	0	84	
Flycatcher, Traill's	1	25 Sept. '61	D	I	—	—	71	Wing tip 15; bill width 7.3
" Least	1	25 Sept. '61	D	I	—	2+	65	Wing tip 11; bill width 6.0
" "	1	20 Sept. '63	D	I	—	2	64	Bill width 5
Martin, Purple	7	14 June '60	—	A	F	—	138-150	Nesting, Pea Island
Swallow (Sp.)	—	18 Sept. '63	D	—	—	—	—	1000's, observed high
Chickadee, Carolina	1	13 Sept. '56	K	—	—	—	—	
" "	1	28 Sept. '59	K	—	—	0	56	Molting
" "	2	29 Sept. '59	K	—	—	—	60, 62	
Nuthatch, Brown-headed	3	19 June '61	D-K	—	—	—	—	Observed
Wren, Carolina	1	13 Sept. '56	K	—	—	—	—	
" "	2	15 June '60	D	—	—	—	—	
" "	2	25 June '61	D-K	—	—	—	55, 59	
" "	1	7 Nov. '60	D-K	—	—	—	61	
" "	2	19 June '61	D-K	—	—	—	60, 64	
" "	1	19 June '61	D-K	A	—	—	—	Return (Banded Nov. '60)
" Short-billed Marsh	1	6 Nov. '60	—	—	—	—	—	Observed, Bodie Island
Mockingbird	1	15 Sept. '56	K	A	M	—	—	
"	1	27 June '61	K	I	—	—	104	
"	1	27 June '61	K	A	M	—	114	
Catbird	1	28 June '61	K	A	—	—	87	
"	1	25 Sept. '61	D	I	—	—	90	
"	1	25 Sept. '61	D	—	—	—	88	
Thrasher, Brown	1	11 Sept. '56	K	I	—	—	—	
" "	4	20 Sept. '63	D	—	—	—	—	Observed
Thrush, Swainson's	2	25 Sept. '61	D	A	—	1	96, 98	
" "	1	25 Sept. '61	D	I	—	1	98	
" "	1	25 Sept. '61	D	—	—	—	98	
" "	2	19 Sept. '63	D	I	—	1	97, 97	
" Gray-cheeked	1	26 Sept. '61	D	—	—	0	100	
Vireo, White-eyed	1	13 Sept. '56	K	A	—	—	—	
" "	1	20 Sept. '63	D	—	—	—	—	Observed
" Yellow-throated	1	20 June '61	D-K	—	—	—	—	Observed
" Red-eyed	1	11 Sept. '56	K	I	—	—	—	
" "	3	25 Sept. '61	D	I	—	1	77, 78, 79	
" "	2	25 Sept. '61	D	I	—	2	77, 81	
" "	1	25 Sept. '61	D	I	—	3	76	
" "	5	18 Sept. '63	D	I	—	3	75 to 80	
" "	1	18 Sept. '63	D	I	—	—	79	
" "	4	19 Sept. '63	D	I	—	2	74 to 81	
" "	1	19 Sept. '63	D	I	—	3	75	
" Philadelphia	1	25 Sept. '61	D	—	—	1	67	
" "	1	19 Sept. '63	D	—	—	2	64	
Warbler, Black and White	1	19 Sept. '63	D	I	M	2	67	
" Prothonotary	2	19 June '61	D-K	A	M	—	73, 74	
" "	1	19 June '61	D-K	A	F	—	67	
" "	4	19 June '61	D-K	I	—	—	68 to 74	
" "	2	20 June '61	D-K	A	M	—	71, 74	One a repeat
" "	1	24 June '61	D-K	I	—	—	—	

Species	No.	Date	Area	Age	Sex	Fat	Wing Chord	Remarks
Warbler, Prothonotary	2	25 June '61	D-K	A	F	—	66, 67	
" "	2	25 June '61	D-K	I	—	—	71, 73	
" Tennessee	1	29 Sept. '59	K	—	—	1	61	
" Parula	1	19 June '61	D-K	A	M	—	58	
" Cape May	1	11 Sept. '56	K	I	M	—	—	
" "	1	12 Sept. '56	K	—	F	—	—	
" "	1	15 Sept. '56	K	—	—	—	—	
" "	1	28 Sept. '59	K	I	M	1	66	
" "	2	29 Sept. '59	K	—	F	2&3	64, 65	
" Black-throated Blue	1	28 Sept. '59	K	—	F	3	62	
" Myrtle	—	6 Nov. '60	D-K	—	—	—	—	Several observed
" Yellow-throated	2	19 June '61	D-K	A	—	—	—	Observed
" Blackpoll	1	19 Sept. '63	D	—	—	1	77	
" Pine	2	13 Sept. '56	K	—	—	—	—	
" Western Palm	1	25 Sept. '61	D	—	—	1	62	
Ovenbird	1	25 Sept. '61	D	—	—	T	75	
Waterthrush, Northern	1	18 Sept. '63	D	—	—	3	74	
" "	1	20 Sept. '63	D	A	—	1	74	
" "	1	20 Sept. '63	D	I	—	1	72	
Yellowthroat	1	19 Sept. '63	D	I	F	2	51	
"	1	19 Sept. '63	D	I	M	—	—	
"	1	19 Sept. '63	D	A	M	2	55	
Chat, Yellow-breasted	1	11 Sept. '56	K	I	—	—	—	
" "	1	18 Sept. '63	D	—	—	2	72	
" "	2	19 Sept. '63	D	—	—	2	76, 74	
" "	2	25 Sept. '61	D	—	—	2	74, 75	
Redstart, American	1	15 Sept. '56	K	—	F	—	—	
" "	1	25 Sept. '61	D	S	M	2	61	
" "	1	25 Sept. '61	D	I	M	2	63	
" "	2	19 Sept. '63	D	—	F	1,2	63, 60	
" "	1	19 Sept. '63	D	I	M	1	62	
Blackbird, Red-winged	1	27 June '61	K	A	F	—	96	
Oriole, Baltimore	1	28 Sept. '59	K	—	—	—	—	Observed
" "	3	25 Sept. '61	D	—	—	—	—	"
" "	—	18 Sept. '63 to 20 Sept. '63	D	—	—	—	—	About 100 flew above nets
Cowbird, Brown-headed	1	20 June '61	D-K	A	F	—	96	
" "	1	25 June '61	D-K	A	F	—	—	
Cardinal	1	13 Sept. '56	K	I	—	—	—	
"	1	28 Sept. '59	K	—	F	—	—	Molting
"	1	15 June '60	D	A	F	—	—	
"	1	25 June '61	D-K	A	F	—	—	
"	1	19 Sept. '63	D	A	F	—	—	
Grosbeak, Rose-breasted	1	19 Sept. '63	D	—	M	2	103	
" Blue	2	15 June '60	D	—	M,F	—	—	Observed
Bunting, Indigo	1	15 June '60	D	A	F	—	—	
" "	1	19 June '61	D-K	S	M	—	67	
" "	1	25 Sept. '61	D	S	M	1	69	
Sparrow, Lark	1	15 Sept. '56	K	—	—	—	—	Observed
Junco, Slate-colored	3	6 Nov. '60	D-K	—	—	T	74 to 76	
Sparrow, Chipping	2	6 Nov. '60	D-K	I	—	T	67, 68	
" "	1	6 Nov. '60	D-K	A	—	T	71	
" "	1	7 Nov. '60	D-K	I	—	—	70	
" Clay-colored	1	19 Sept. '63	D	I	—	2	61	
" Field	3	11 Sept. '56	K	—	—	—	—	
" "	1	29 June '61	D-K	—	—	—	62	
" White-throated	1	25 Sept. '61	D	—	—	0	72	Dull
" Swamp	2	6 Nov. '60	D-K	I	—	1,0	60, 60	
" Song	1	7 Nov. '60	D-K	—	—	0	63	

ELIZABETH D. PEACOCK, *200 Highland Road, Fairfax, Virginia, 1 October 1964.*

Mist-netting on the Outer Banks September 1964.—As part of "Operation Recovery" four of us banded birds 24-26 September 1964 on Bodie Island, Dare County, North Carolina; and in 114 net-hours we banded 72 birds of 25 species, using up to six nets.

Our venture had multiple purposes in addition to contributing to "Operation Recovery." First, there was a desire to check sight records by mist nets, as Hailman and Hatch in 1962 banding had suggested it was a means of discovering birds that were not readily seen. (*Chat* 28:28-29, 47-48). Second, Paul Sykes was beginning an intensive study of the migration of land birds along the Outer Banks as part of a graduate course at N. C. State of the University of North Carolina at Raleigh, and this was a chance to help him. Third, Grey had gathered all published records up to 1944 on bird life from Cape Henry to Cape Hatteras, and noted that while there was good data on waterfowl and shore birds for the area, there was much question about the status of land birds, especially during migration. Likewise, there was taking place a change in bird life as more of the Outer Banks were grassed over and vegetation stabilized. Thomas Quay had brought the records up to 1959 in his, *The Birds, Mammals, Reptiles, and Amphibians of Cape Hatteras National Seashore Recreational Area*, but still the gaps were tremendous: only 12 warblers had been recorded, for instance. It was therefore evident that anything we did by banding would contribute to our knowledge of the bird life for the area.

Through the cooperation of Park Superintendent Karl Gilbert, we obtained the required written permission to band. Thompson's permit allowed six nets, and we set them along the Water Tower Road, and later near the Boneyard, both near Bodie Island pond, but out of sight of tourists.

Species and individuals banded were: Black Skimmer 1, Yellow-shafted Flicker 1, Hairy Woodpecker 1, Downy Woodpecker 1, Mockingbird 2; Catbird 6; Brown Thrasher 2, Swainson's Thrush 21, White-eyed Vireo 1, Black-throated Blue Warbler 1, Pine Warbler 1, Prairie Warbler 2, Palm Warbler 2, Yellowthroat 2, Hooded Warbler 1, American Redstart 10, Baltimore Oriole 2, Rose-breasted Grosbeak 2, Savannah Sparrow 1, Lark Sparrow 1, Chipping Sparrow 1, and White-throated Sparrow 2.

Swainson's Thrush and Rose-breasted Grosbeak are new to published accounts for birds of the region. We were surprised by the abundance of the thrushes and were fortunate to be in the midst of a major migration of these birds as they were taken in quantities at the same time on the Eastern Shore of Virginia and also near Richmond, Virginia. We were also surprised that all thrushes we took were of the same species. The White-throated Sparrows were very early, on the 25th. The earliest published occurrence for the State appears to be 21 September, when Hader and Hunt found one at Raleigh (*Chat* 27:28, 1963).

The warblers were most interesting. We saw 12 species—a number equal to the total number seen over many years as recorded by Quay (above), five of them new to his list, though recorded by Hailman and Hatch (above). The total list of warblers for the area seems to be 21.

Birds were taken at all hours of daylight, even when nets were in bright sunlight. This was due in part to the arrival of a cold front the night of 24-25 September and the fact that birds were moving throughout the day. It is quite probable that earlier banding trips to the Outer Banks were successful in the main because they had similar weather.

Paul Sykes has limited his study of the migration of land birds to the area from Whalebone Filling Station (where roads to Manteo and the Park meet) to the Pea Island Refuge Headquarters in the old Pea Island Coast Guard Station. He hopes that all data gathered in this area on the land birds may be shared with him at Apt I-16 McKimmon Village, N. C. State of UNC, Raleigh, N. C.

JOHN GREY, *Box 445, Williamsburg, Virginia;* ROGER MILLER, *Colonial National Park, Yorktown, Virginia;* JOHN THOMPSON, *Rocky Mount, North Carolina;* RICHARD H. SILER, *Cliffs of Neuse State Park, Goldsboro, North Carolina, 3 October 1964.*

Fall Migrant Passerines at Ocracoke, North Carolina.—On the morning of 25 August 1964 my husband and I visited the town dump at Ocracoke, Hyde County, North Carolina. This trash pile is reached by traveling narrow paved roads constructed to service a World War II ammunition depot. We were directed to this excellent place to study migratory passerines by Mrs. Jack Willis, Ocracoke CBC member.

At the trash pile the most abundant passerine (excluding the House Sparrow) was the American Redstart. There were at least eight of these birds, all in female plumage, I believe. All had grey heads, white eye-rings, and lemon yellow patches at each side of the clear white breast. Some may have been immature females, but apparently there were no young males in the group since none showed the flecks of black on the breast or the tinge of orange characteristic in the yellow feathers of immature males.

The only other warbler positively identified was a Northern Waterthrush. Hailman and Hatch (*Chat,* 28:28-29,47, 1964) in reporting their work with fall migrant passerines on the Outer Banks noted the abundance of the American Redstart, but they did not mention either waterthrush.

Three Lark Sparrows rested for about 10 minutes in the top of a dead tree near the trash pile and departed together. One Baltimore Oriole was seen, and a White-eyed Vireo was heard.—ELOISE F. POTTER, *Box 487, Zebulon, North Carolina, 21 September 1964.*

BRIEFS FOR THE FILES

Horned Grebe, 1, freshly killed on the causeway to Sullivan's Island, S. C., 21 October, a very early date, Norman A. Chamberlain. • **Double-crested Cormorant,** tremendous flights estimated to total 5000, moving north, off-shore at Murrell's Inlet, S. C., 22 March, Mrs. Ellison D. Smith. • **Cattle Egret,** 250-300 near Highway 70 and Merrimon Highway, Carteret County, N. C., 15 May, Eugene Pond; 35 in pasture near Manning, S. C., 24 April, Mrs. Ellison D. Smith. • **Louisiana Heron,** 1 at rain pool, North Wilkesboro, N. C., 1-3 September, "a new species for me here," Wendell P. Smith. • **Least Bittern,** 1 immature, in the Yadkin River, "industriously pulling out of a sandbar what looked like night crawlers, North Wilkesboro, N. C., 26 August, the first I have found here," Wendell P. Smith. • **Blue-winged Teal,** 1 pair on North River Marsh, Carteret County, N. C., 20 May, Eugene Pond. • **Shoveler,** 1 on Lake Johnson, Raleigh, N. C., 27 August-12 September, R. J. Hader. • **Semipalmated Plover,** 3 to 5 at Lake Johnson, Raleigh, N. C., 26, 27, & 28 August, R. J. Hader. • **White-rumped Sandpiper,** 20-25 on flats at Bodie Island, N. C., 12 June, J. F. Parnell; 1 at Wrightsville Beach, N. C., 20 September, J. F. Parnell, Mr. & Mrs. Jack Potter. • **Dowitcher** (sp.), 300-500 on Bodie Island, N. C., 12 June, J. F. Parnell; 1 on 26 August and 1 on 4, 5, 7, & 12 September, Lake Johnson, Raleigh, N. C., R. J. Hader. • **American Avocet,** 2 at Lake Johnson, Raleigh, N. C., 26 August, may be the first inland record for the state, R. J. Hader. • **Northern Phalarope,** 1 female at Yaupon Beach (Southport), N. C., 24 May 1963, David Adams, Mr. & Mrs. Jack Potter. • **Great Black-backed Gull,** 2 at Murrell's Inlet, S. C., 22 March, Mrs. Ellison D. Smith; 1 at Rich Inlet, Wilmington, N. C., area, 7 September, Maurice Barnhill. • **Least Tern,** several, at Murrell's Inlet, S. C., 9 April, Mrs. Ellison D. Smith. • **Western Kingbird,** 1 or more, at Edisto Beach, S. C., 17 & 18 October, Mrs. Paul Atwood, Fred Denton, Mr. & Mrs. Fred May. • **Traill's Flycatcher,** 2 pair nested again in wooded swamp near North Wilkesboro, N. C., last seen 19 August, Wendell P. Smith. • **Warbling Vireo,** 1 scolding, at North Wilkesboro, N. C., 8 July, Wendell P. Smith. • **Blue-winged Warbler,** 1 at Raleigh, N. C., 10 and 24 September, R. J. Hader. • **Tennessee Warbler,** 1 at Raleigh, N. C., 21 September and 4 & 6 October, R. J. Hader. • **Orange-crowned Warbler,** 1 wintering bird at Clemson, S. C., feeder, last seen, 30 March, Donald B. Snyder. • **Black-throated Green Warbler,** 1 at Raleigh, N. C., 6 October, R. J. Hader; 1 at Edisto Beach, S. C., 18 October, Mr. & Mrs. C. G. Hughes, Mr. & Mrs. Fred May. • **Baltimore Oriole,** 1 female at feeder at Columbia, S. C., 15 March through 1 April, Mrs. Ellison D. Smith. • **Scarlet Tanager,** a male seen feeding young in nest 27 July, within sight of fire tower on Sassafras Mountain, Pickens County, S. C., Donald B. Snyder. • **Rose-breasted Grosbeak,** 1 female and 1 immature male (?) in yard in suburban Charleston, S. C., 16, 22, & 25 September, and 6 & 11 October, Mr. & Mrs. Francis Barrington. • **Lark Sparrow,** 1 at North Wilkesboro, N. C., 19 August—the second record for the area, Wendell P. Smith; 1 in oak avenue on Wadmalaw Island, S. C., 9 & 10 Sept., Mr. & Mrs. B. R. Chamberlain. • **White-crowned Sparrow,** 3 at Edisto Beach, S. C., 18 October, Mr. & Mrs. C. G. Hughes, Mr. & Mrs. Fred May. *All dates 1964 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

BOOK REVIEWS

Song and Garden Birds of North America. Alexander Wetmore. Available only from National Geographic Society, Washington, D. C. 1964. 400 p. Illus. Index. $11.95 postpaid.

Song and Garden Birds of North America is a beautiful, comprehensive, and intellectually stimulating book which will help the average bird watcher grow in his understanding of ornithology. Although apparently written for adults and teenagers, this book can be enjoyed by every member of the family.

The binding, paper, and color reproduction are excellent, exactly what would be expected in a National Geographic Society publication. In the 400 pages there are photographs or drawings of 327 species, a total of 555 illustrations with 509 in full color. Among the photographers are Eliot Porter, in my opinion the best bird photographer of all time; Frederick Kent Truslow, whose bird pictures compare favorably with Porter's; the late Arthur A. Allen, who also wrote the two chapters on finches; and Crawford H. Greenwalt, who wrote the chapter on hummingbirds. While some illustrations are much better than others, the overall quality is so superior that one can only be amazed. Most of the photographs meet the triple standard of being technically correct in focus and exposure, attractive in composition, and meaningful in that they show something significant about the way a bird lives.

Although greatly enhanced by the illustrations, the text is in no way subordinate to them. An opening chapter by Dr. Wetmore gives the reader important background information on bird anatomy, flight mechanics, and behavior. Basically non-technical, this chapter is written in a fine literary style with technical explanations skillfully woven in wherever necessary to avoid ambiguity. In the second chapter Dr. Wetmore shares with the reader some of the pleasures of backyard birding. Thereafter the chapters describe each family of North American birds from hummingbirds through finches. Each species is almost always illustrated on the same page with its life history. When males and females differ a great deal, both are shown. At the conclusion of each life history is a paragraph giving range and characteristics (field marks). About midway the book comes the interesting chapter Courtship and Nesting Behavior, by Robert McClung. The concluding chapter by Roger Tory Peterson is, as would be expected, an excellent introduction to the methods of identifying birds in the field.

Inside the back cover there is an album of six small 33 1/3 rpm records giving 70 bird songs. Each side is arranged as a short bird walk in a particular part of the country, one location being Charleston, South Carolina. Frankly, I began listening with skepticism and was completely surprised to hear bird calls reproduced with a fidelity far superior to the album the Cornell Laboratory of Ornithology made to accompany the Peterson field guide.

From the frontispiece habitat map to the last recorded bird song, *Song and Garden Birds of North America* shows the good taste and sound scientific judgment of the author and the publisher. The companion volume covering the water, game, and predatory birds can only be anticipated with great eagerness.—JACK POTTER

Audubon's Wildlife. Edwin Way Teale. The Viking Press, New York. 1964. 256 p. (8½ x 11 inches). Illus. Index to illustrations. $15.00.

Editor Edwin Way Teale has drawn tastefully upon the writings and artistic creations of John James Audubon to depict for modern naturalists the American wilderness as Audubon knew it. While there are quite a few illustrations and excerpts from *The Viviparous Quadrupeds of North America*, the materials from the Elephant Folio and *Ornithological Biography* tend to dominate. After all, what mammal picture can compete with Audubon's Carolina Parakeets reproduced in full color on a double-page spread? An introductory biographical sketch helps the reader better appreciate Audubon's accomplishments. Teale modestly claims in an Editor's Note that this book "provides a new look at Audubon." Indeed it does, and a very good look it is.—ELOISE F. POTTER.

Thirty Birds—An Introduction. John Trott. Audubon Naturalist Society of the Central Atlantic States, Inc., Washington, D. C. 36 p. Illus. by Bob Hines. Indexed. $1.00.

Thirty is a handy goal for beginning birders. It sounds tremendously exciting to someone who still thinks that a Carolina Wren is a baby Brown Thrasher, and yet such a beginner could be persuaded that this number is not completely impossible of attainment. Then when he has discovered how easy it is to learn actually to identify this number, what a feeling of accomplishment he has! And what a firmly hooked birder John Trott has!

The choice of birds included is an excellent one for a beginner in the CBC area. The style is refreshingly readable for new birders of all ages, the sparrow sketch for comparison of sizes is very helpful, and the arrangement of the excellent illustrations on the same page with the appropriate text makes for efficiency in field use.

In fact, any schoolteacher would recognize at once that this little book was written by another schoolteacher out of a wealth of experience in good teaching. Its modest price should encourage keeping a supply on hand for gifts to any unwary acquaintance who shows a glimmer of interest in birds, or for a donation to a classroom group that might harbor potential birders.—GLADYS BAKER

Life Histories of North American Birds. Arthur Cleveland Bent. Bulletins of the U. S. National Museum. Reprinted by and available from Dover Publications, Inc., 180 Varick Street, New York, N. Y. Paperback.

Gulls and Terns. 337 p. $2.75.
Petrels and Pelicans and Their Allies. 335 p. $2.75.
Gallinaceous Birds. 490 p. $2.75.
Woodpeckers. 334 p. $2.75.
Cuckoos, Goatsuckers, Hummingbirds and Their Allies. 506 p. in 2 parts. $2.50 each.
Flycatchers, Larks, Swallows, and Their Allies. 555 p. $2.75.
Jays, Crows and Titmice. 495 p. in 2 parts. $2.50 each.
Wood Warblers. 734 p. in 2 parts. $2.50 each.

The above eight volumes of Bent's monumental 20-volume series of life histories have appeared since D. W. Johnston reviewed the first Dover reprints a year and a half ago (*Chat*, 27:33). Certainly Dover Publications should be congratulated for making these ornithological classics, some volumes long out of print, available at a modest price for a new generation of bird students.

These are no ordinary paperbacks. The sturdy paper covers have given no trouble on my home bookshelf. The quality of the paper, the margins allowed, and the stitched signatures are such that these editions would be well worth placing in hard covers for public or institutional library use.

All volumes are faithful reproductions of the original editions and are complete and unabridged, including bibliography, index, and plates. While the black and white plates are often genuinely interesting, the photographs look decidedly dated when compared to the lovely color illustrations in most bird books today. But one does not buy Bent's *Life Histories* for the pictures. These volumes remain enjoyable to read and useful as references because their editor had the rare combination of literary skill and scientific knowledge necessary to weave the birding experiences of thousands of observers into fascinating accounts of each species. Since Bent's death, his work has been carried on by the staff at the U. S. National Museum.

The long-awaited final volume on finches should be ready for publication in the not too distant future. Every serious bird student will want and need the complete set.

Anyone still in doubt about the wisdom of investing in these reprints need only read the tribute to Bent's work on page 398 of National Geographic Society's lavish new book, *Song and Garden Birds*, which is reviewed elsewhere in this issue: "In preparing the bird biographies, constant resort was made to Arthur Cleveland Bent's life histories of North American birds, an unprecedented work compiled by this determined New Englander over a period of 44 years." Almost every writer in the field of ornithology today owes Bent a similar acknowledgement.—ELOISE F. POTTER.

Sort Guide to the Eastern Land Birds. George C. West. Crown Publishers, 419 Park Avenue South, New York 16, New York. 1964. $4.95.

"I saw the strangest little brown bird in my back yard this morning. What is it?" How often have you heard this question, or perhaps you may have asked it yourself. Well, here is a new, novel, and accurate way to identify the bird you have seen and at the same time develop the habit of being more observant.

The little brown bird had a white throat, some white on the head, and a yellow mark before the eye. After using the sorter and selecting the proper guides as coded on the back of each card, out falls the card—White-throated Sparrow. It is just that simple. Here is another way to help you see and identify birds. We enjoy birds more if we learn to see them! *Sort Guide* teaches you to see birds by showing you what to look for.

Each *Sort Guide* consists of a deck of cards, sorting needle and instructions, packaged in a durable plastic box. The 155 cards have a descriptive side with illustrations and text for 247 species and an index side showing the characteristics you can sort for. Fortunately, the instructions to sort are clearly defined and simple to follow. To be sure this is correct, I selected at random seven birds—Bobwhite, Carolina Wren, Prothonotary Warbler, White-throated Sparrow, Red-tailed Hawk, and Goldfinch—and in each instance the proper card appeared at the proper time.

The descriptive side of each card illustrates the bird(s), gives the proper and scientific name, and in the descriptive text important identification characteristics are shown in bold face type; also a range map appears showing the winter and summer range of each bird and where applicable, arrows indicate the migration route.

The index side of each card is standardized and the margin is notched for subsequent sorting and selection. On the margin, and in designated groups, one can sort for color, shapes, and behavior; on another margin you sort for markings (head-tail-back-underparts), and size; on another margin, a novel idea, if you think you know the kind of bird you can sort alphabetically such as w-warbler, s-sparrow, s-hawk, or c-crow. The pleasant thing about this sorting is that with a little practice you will discover short-cuts that will locate your card quicker.

Some of the birds are illustrated in color, some in black and white. In the set I received the color illustration seemed to be washed-out and faded, but not too severe for identification by comparison. This does not detract from the intended purpose and usefulness of the *Sort Guide*.

Here is an answer to the bird student who is seeking an easy, quick, and effective way to identify an unfamiliar bird.—W. L. HAMNETT

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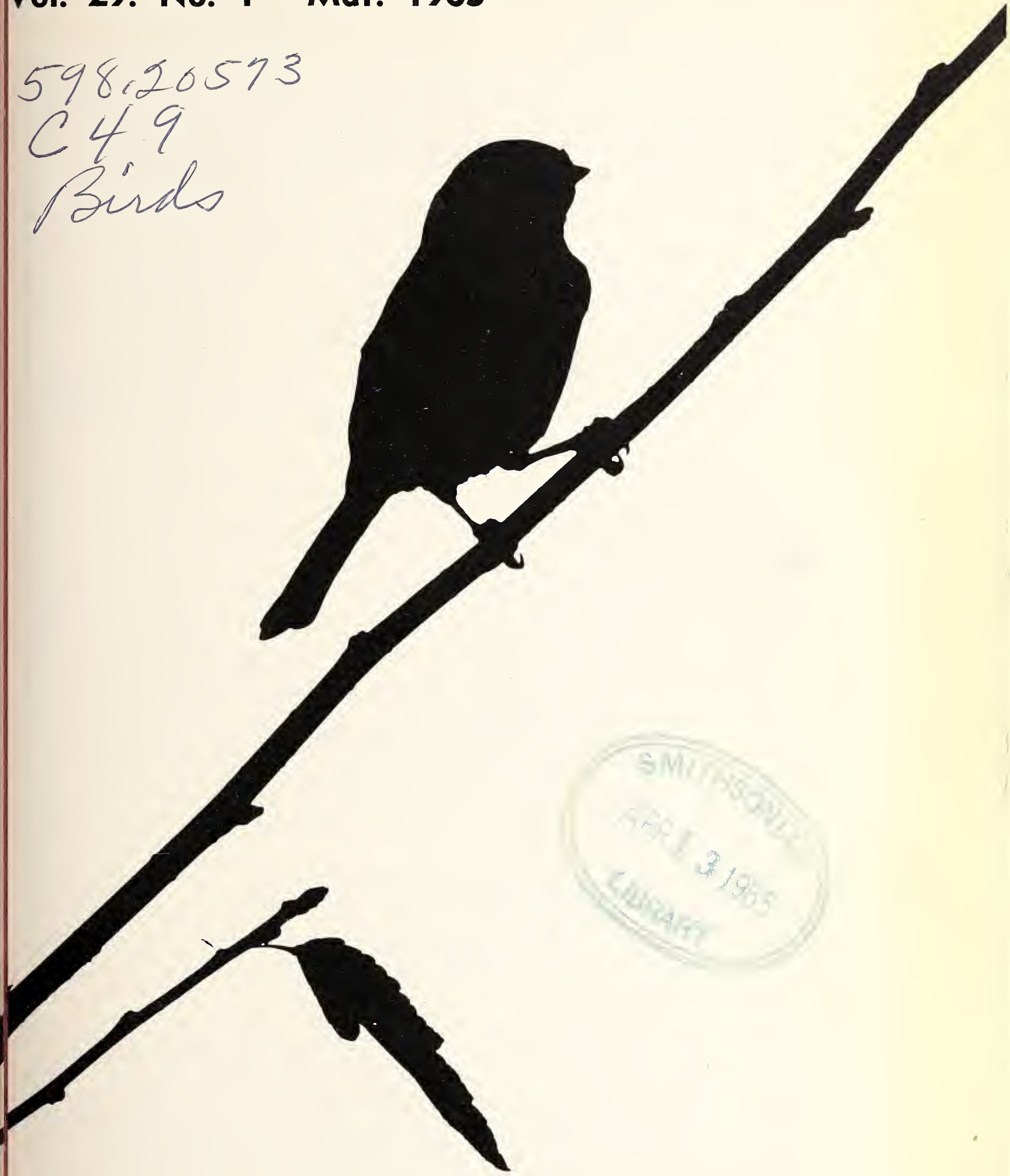

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Cover Photo—A Carolina Chickadee silhouette contrived through photographic processes from a 35 mm transparency by Jack Potter.

SWAINSON'S WARBLER IN THE CAROLINAS

JAMES F. PARNELL

The Swainson's Warbler *(Limnothlypis swainsonii)* was discovered by Dr. John Bachman in 1833 in the "low country" of South Carolina (Sprunt and Chamberlain, 1949). Since its discovery it has been recorded only sporadically and remains one of the least known of the warblers inhabiting the southeast. Chapman (1907) gives the range of this warbler as the swamps along the east coast from the Dismal Swamp of southeastern Virginia to northern Florida, along the Gulf Coast to Louisiana, and up the Mississippi Valley to southern Missouri. In all early reports swamps and canebrakes were noted as a necessary part of its habitat. This range has been generally confirmed in the Carolinas, with at least a sparse, but general, occurrence indicated for the coastal plain of the two states (Pearson et al., 1959 and Sprunt and Chamberlain, 1949).

In May of 1934 and of 1935, however, Swainson's Warblers were reported from the mountains of North Carolina at Tryon (Williams, 1935). Since that time several other spring and summer records have been made from the upper Piedmont and mountains of the Carolinas (Pearson et al., 1959 and Sprunt and Chamberlain, 1949). One observation of particular interest was that of a singing male seen and heard on 19 and 30 May in the Sumter National Forest about one-half mile below the North Carolina line on Highway 107 (Shuler, 1962). No actual evidence of nesting was found in any of the above observations, although the latter indicated this possibility.

The first specific evidence of the Swainson's Warbler nesting in the mountains of the Carolinas came from Transylvania County, North Carolina during the summer of 1961. On 18 June 1961, while conducting a research program concerned with the summer bird life of the Toxaway River Gorge (Parnell and Quay, 1964), I found an adult Swainson's Warbler feeding two fledgling young. The young birds were capable of only short flights and appeared to have been out of the nest for only one or two days. This observation was made in a densely vegetated cove along the Toxaway River at about 1,400 feet elevation. Subsequently, Swainson's Warblers were seen throughout this deep river gorge which drains from the south face of the Blue Ridge Plateau onto the Piedmont of South Carolina. Elevations ranged from 1,100 to 3,000 feet. They were seen in all forest types; which included oak forests, mixed mesophytic coves and slopes, and pine flats along the river edge. They were most common in the pine flats. Within these general forest types this warbler was usually associated with thickets of rhododendron *(Rhododendron maximum)*, mountain laurel *(Kalmia latifolia)*, and dog hobble *(Leucothoe editorum)*. Often the birds were near the river or small streams, but observations were also made some distance from water.

Apparently, the nesting season was nearly over by mid-June when the single brood was found. Singing males were heard daily well into August, however, which seemed to indicate an extended period of post breeding song. Intensive searches during this period failed to yield either nests or young. Two male Swainson's Warblers were collected, and both had the enlarged testes characteristic of breeding birds.

The presence of this sizable population of Swainson's Warblers throughout the Toxaway River Gorge suggests that this species is likely to be a fairly common summer resident in the other river gorges draining the Blue Ridge Plateau. Two factors have probably been important in the sparsity of records from this region. First, these river valleys are steep and very rugged. The Toxaway River drops 1,900 feet in a linear distance of only about six miles. The depth of the V-shaped valley is between 500 and 600 feet. The lush vegetation, resulting from very high summer rainfall, is dense; and roads penetrating the gorges are few and often impassable

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during the wet summers. This means that very few observers have penetrated into these valleys during the nesting season. Second, I found the song of the Swainson's Warbler to resemble that of the Louisiana Waterthrush very closely. This similarity of song has also been noted by Williams (1953) at Tryon and by Scott in the Great Smoky Mountains National Park (Stupka, 1963). It is probable that most observers, familiar with the song of the Louisiana Waterthrush but not with that of the Swainson's Warbler, would record the bird as a waterthrush if depending on song alone. This is particularly important when considered in the light of the shy nature of the Swainson's Warbler and the difficulty of observing it clearly in the deep shade and thick cover with which it is usually associated. The problem is compounded by the co-inhabitation of the same localities and habitats by the Louisiana Waterthrush.

Reports of breeding populations of Swainson's Warblers in the mountains of Georgia (Burleigh, 1958) and West Virginia (Brooks and Legg, 1942) in recent years, along with the North Carolina records, indicate a continuous breeding population along the eastern edge of the mountains.

This preliminary work suggests that observers working in areas along the eastern edge of the Blue Ridge Mountains in particular, and throughout the mountains in general, should be especially watchful for this species. Careful searching along the stream valleys with particular attention to song may yield observations that will help to determine the distribution of this seldom seen warbler in the mountains of the Carolinas. Certainly much more careful field study is necessary to establish a pattern of occurrence for this species in the Carolinas.

Acknowledgements

I am grateful to the National Science Foundation, the Highlands Biological Laboratory, and North Carolina State College for assistance in making the Toxaway River research, of which this report contains a part, possible. Dr. T. L. Quay assisted with the direction of the project.

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Biology Department, Wilmington College
Wilmington, North Carolina

BIRDING IN BRITAIN

Gladys Buckner

Even as the great variety of American birds is a continual source of interest, so the birds of other countries excite the birder's curiosity. Equipped with binoculars, *A Field Guide to the Birds of Britain and Europe* by Peterson, Mountfort, and Hollom, and a seeing eye, the individual cannot fail to identify independently a few birds when traveling in a foreign country. Unexpectedly the European goldfinch will light in a garden tree; a pied wagtail will glide across a lawn; a chaffinch or a blackbird or a song thrush will serenade from the treetops; a crested lark will return to its old habitat usurped by the recently developed International Flower Show at Vienna; or a black capped warbler will appear, as if seeking musical inspiration, in the shrubbery surrounding the graves of Beethoven, Brahms, Schubert, and Johann Strauss in the cemetery on the outskirts of Vienna.

But, if one wishes to see many different species of European birds within a limited time, the traveler will not go wrong to join a guided bird tour. Such was my privilege from 14-27 June 1964, when, as a member of a Birds of Britain Tour, I had the opportunity to visit bird reserves in England, Wales, and Scotland and make observations over the British countryside with expert guidance which also included identification of wild flowers and a chance to visit places of historic interest within the immediate range of our birding activities.

With London as the point of assembly our bus took us to Ipswich in Suffolk via Colchester. Within an hour or so, exploring the marshlands along the Stour river at picturesque Flatford Mill, we saw the sedge warbler, the reed bunting, easily distinguished by the white about its neck, shelducks with their young, swans, mallards, the goldfinch, and the song thrush.

Minsmere Bird Reserve

A short distance from Ipswich is Minsmere Bird Reserve on the Suffolk coast. This reserve is under the supervision of the Royal Society for the Protection of Birds, Britain's counterpart of our National Audubon Society. Minsmere embraces 1,500 acres divided into three main habitats: marshland, woodland, and heathland, the most important of which is the marshland. Originally fenland, it was drained in 1813 and became grazing land subject to flooding. Because it offers an unbroken stretch of sea to Holland and Germany it was re-flooded in 1945 as a defense measure. In 1947 it was leased by the R.S.P.B., the same year being marked by the return of the avocet to that area.

Greeted by the resident warden and his wife, Mr. and Mrs. H. E. Axell, we had a full day's personally conducted tour of the three habitats. We peered from each of the nine hides (blinds) overlooking the marshes, the chill wind from the North Sea blowing in our faces, and saw avocets with their young, redshanks, spotted redshanks, surface feeding ducks, herons, and marsh harriers. As we made our way through the reeds to one of the hides we heard the booming of the bittern and saw the rare bearded tit, a long tailed, tawny bird with lavender head, yellow bill, and black moustaches.

Along the seashore growing in the sand dunes were clumps of prickly gorse aglow with yellow blooms, and the fragrant yellow and white lupine suggested the taste of certain kinds of honey. Here we had our first view of the rusty breasted stonechat and the demure linnet, saw the ringed plover, the oystercatcher, the little tern, and the lapwing with its jaunty crest. Here, too, the meadow pipit showed himself and the skylark twinkled high above us and seemed suspended in mid-air as it sang breathlessly for about four minutes, and then dropped to earth like a stone.

In the woodland area the warblers and thrushes and finches were generous with their song; we heard the cuckoo call and glimpsed a nightingale as it flitted momentarily from deep cover, sparing with its song because it was nesting.

On the barren heath amid the rocks and heather we saw the stone curlew take wing, a large pale brown and white plover that makes its nest on rocky or sandy open ground, normally has only two eggs, and is very rare.

It was a memorable day at Minsmere. The air was chill and invigorating, the wild flowers—woody nightshade, pink and white campion, wild lupine, marsh orchids, yellow water iris, rock sedums, bell heather, luxuriant, five-foot tall bracken that lined the woodland paths—were a delight to the eye. But, the birds! Of the 94 breeding species on the reserve and the 210 species that are seen during the year, we saw 75 species.

ROYAL SOCIETY FOR THE PROTECTION OF BIRDS

The headquarters of the Royal Society for the Protection of Birds at The Lodge, Sandy, Bedfordshire, England, comprises 100 acres and offers a variety of habitats to some 80 species of birds. Here we were told how the R.S.P.B. operates. A private organization without state aid, about 75 years old, it maintains reserves covering some 10,000 acres, all the reserves being headed by wardens. The aims of the Society are to protect birds in all aspects by trying to improve sites for bird habitats and by trying to educate the public. In pursuance of this last aim access to the reserves is allowed by permit, effort is made to interest the schools, and two bi-monthly magazines are published, one for adults and one for children. At some of the reserves a weekly bulletin is issued by the local staff. Land for the reserves is acquired by actual purchase, by leasing, or by an agreement with the owner. Support is by private subscription.

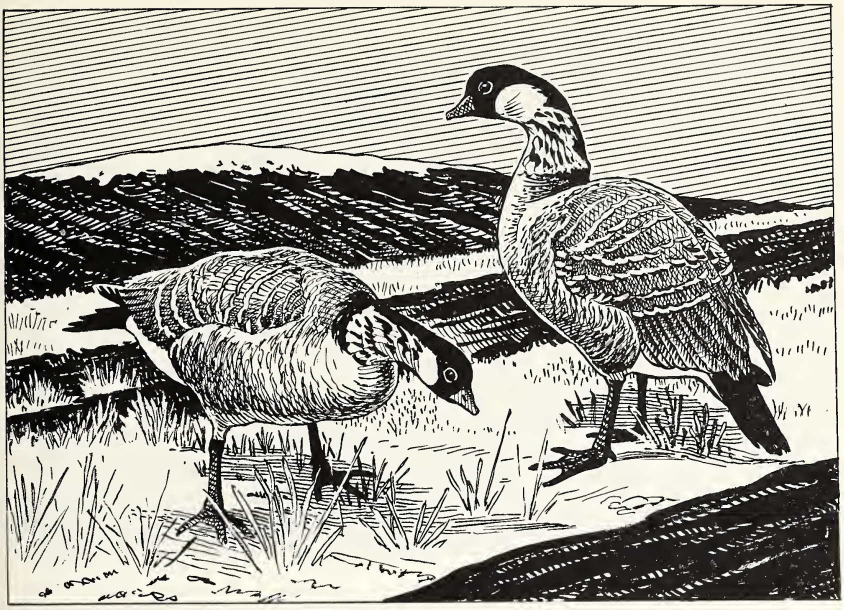
PETER SCOTT'S WILDFOWL TRUST

At Slimbridge near Gloucester is the largest and most varied collection of ducks, geese, and swans in the world, some 2,000 birds of 160 different species and races. This Wildfowl Trust is privately owned by Peter Scott, was begun 17 years ago, and covers 40 acres. The purpose of the Trust is conservation by fostering public interest through education and by scientific research. Identification of the birds by one unaccompanied by a guide is not difficult as there are a series of small pens with identifying labels. In the larger pens with mixed flocks identities may be checked by means of a colored key.

With specimens of fowls from every part of the world the rarest duck is the Laysan duck from Laysan Island (900 miles west of Honolulu) of which the Trust has 50. However, the rarest bird is the Nene or Hawaiian goose. It is a gray bird with black head and unusual neck markings suggestive of spiral strands of black wool. About ten years ago there were only 40 of the species left. Three were sent to the Trust. Now the Trust has 210 and altogether there are 490 extant. But the Nene has never adapted to the English climate. It still nests about Christmas time. Most of the eggs are hatched in incubators and the young are mothered by foster mothers which are largely bantam hens. This method of raising the young is followed for many of the other rare specimens.

NEWBOROUGH WARREN

On the island of Anglesey across the Menai Strait is the Newborough Warren, so named because of the thousands of rabbits that were annually trapped in the area before myxomatosis reduced their number. Besides offering suitable habitat for many birds this is the most important botanical reserve in Wales. Here the young and knowledgable Peter Hope Jones,



NENE GEESE AS THEY APPEAR ON FEDERAL DUCK STAMP

The Nene, or Hawaiian Goose, is native only to that State and is its official bird. In Hawaiian, "nene" (pronounced "nay-nay") means "to croak as (a) mudhen." The Nene, both male and female, is grayish brown with distinctive creamy neck markings. Its feet are only partially webbed because it has been away from water a long time. It lives on berries and greens. Home to the Nene is the old lava flows on the slopes of active Mauna Loa and a neighboring extinct volcano, 5,000 to 7,500 feet above the Pacific. This habitat is barren, rugged, and formidable. But, here and there, it is broken by heavily forested Kipukas, which are portions of the mountain slopes missed by recent lava flows. The Nene go to these lush "holes" in the blanket of lava to nest and rear their young. For protection from wild pigs, dogs, and hunters, they roost in a type of lava flow that has a surface like a floor of broken bottles.

Researchers estimate that once there were 25,000 Nene in the Hawaiian Islands; but predators, hunting (today forbidden), and the loss of habitat decimated their ranks. In 1948, when the Legislature of Hawaii appropriated $6,000 to help save the bird, there were only 13 in captivity and 12 to 50 in the wild. Hawaii's program included a study of the relationship between the Nene and its environment, the setting aside of 8,100 acres as sanctuary, the breeding of captive birds, and the release of their offspring into former wild habitats. In 1958, Congress passed a bill authorizing the annual expenditure of $15,000 for a program of research, propagation, and the management necessary to effect the restoration of the Nene to its natural habitat.

By 1964 a total of 150 geese had been released into the wild. Most of these birds were reared in the State's game farm, but 49 were supplied by the Wildfowl Trust in England, which is discussed in Miss Buckner's article. The wild flock is located only on the island of Hawaii and neighboring Maui. Conservationists are hoping to develop additional sanctuaries and the best combination of habitat factors to sustain a wild Nene population of at least 500 birds on Maui and 500 on Hawaii.

Nesting oceanic birds line the narrow ledges of the South Stack. These beautiful cliffs in Wales were photographed by Mercedes Buckner.

the warden, was our host. The functions of the reserve—to advise, to make scientific research, to assess bird and flower populations, to guard shooting rights, to educate the public in conservancy—are explained to visitors, many of whom are attracted to the site by the abundance of marsh birds. As we watched the reed buntings darted in and above the reeds, a kestrel hovered, gulls circled. Beyond in the shallow water swans, Canada geese, gallinules, and shelducks floated as lapwings, oystercatchers, redshanks, and herons waded and fed. A skylark ascended singing high above while another sang from a fence post. At our feet grew colorful wild flowers—yellow rattle, eye bright, marsh orchids, speedwell, yellow iris, horsetail fern, campion.

Adjoining the botanical area is a 1500-acre forested area where bird boxes have been installed to attract the blue tits and coal tits which eat the caterpillars that defoliate the trees, this method of destroying the insects being preferable to spraying.

A short walk and we descended 440 steps along the steep precipice known as South Stack overlooking the Irish sea. Arriving at the swinging bridge connecting the island of Anglesey with a small, rocky lighthouse island we could see the strange and beautiful geologic formation of the precipice. Dating to the Pre-Cambrian era, the folds of rock resemble great garlands of an intricate, lace-like texture among which nestle natural rock gardens with flowers of varied colors and great beauty—pink thrift, yellow vetch, white daisies, pink blooming sedums.

On the ledges and in the grassy burrows of the cliffs the gulls, guillemots, razorbills, and puffins have their nests. The puffins, back from a flight, would stand in front of the burrows as if reluctant to disappear within and resume family cares. This striking little bird with its triangular bill lays only one egg a year, of a greenish-white hue, about the size of a pigeon's egg, and pointed at the end—the pointed eggs of the cliff birds do not roll easily off the cliff ledges. The incubation period of the puffin egg is about 40 days. For six weeks the mother stuffs the young bird, then she leaves it. In time hunger brings it out of the nest and eventually it falls over the cliff into the water after which it finds food independently.

LAKE DISTRICT

Our guide in the Lake District was Canon Hervey whom we met at "Brantwood." Ornithologist, botanist, and geologist in addition to being spiritual advisor at the picturesque eleventh century parish church at Great Salkeld, the genial Canon showed us the birds and wild flowers and explained the natural history of this area. "Brantwood," once the home of John Ruskin, is now a Conference Center run by the Council for Nature with Stanley Jeeves, Films Officer of the Council for Nature, as warden. Built on the side of the mountain in a setting of rhododendrons, it overlooks Lake Coniston. Surrounded by rolling green fells, it is an accessible two miles to the village by way of a lovely road outlined with dry stone walls overhung with hedges. It is equipped for day visitors and those who want to take a residential field course in the practice of nature conservancy.

OSPREY NEST VISITED

In the Scottish highlands we stopped at Loch Garten Sanctuary on Speyside. Of particular interest at this reserve was the osprey's nest 1½ miles off the main road. We walked over a wet, peaty field overgrown with grasses and bog cotton to the first hide where we viewed the nest through strong binoculars and were told the story of the return of the ospreys. Then, cautioned to be quiet, we went singly to a closer hide. The nest was in a small branchy tree with the mother bird plainly visible. Her three young, about three weeks old, bobbed up in the nest flapping their wings in practice for future flight. A short distance away in a similar tree the male bird perched, apparently on guard. The R.S.P.B. maintained a 24-hour watch over the nest as a precaution against marauders, human and otherwise.

After an absence of 49 years the osprey returned to Britain in 1959. The first year the lone bird built a nest but was unable to find a mate. In successive years failure to raise young resulted either because the eggs were stolen by egg collectors or because of the infertility of the eggs due to chemical toxins. This, the first year of successful incubation of young, has created a sensation among British birders.

HANDA ISLAND

On the Scottish moors on our way northward we saw curlews and red grouse. Wheatears played hide and seek among the rocks, and on the lochs the black-throated and red-throated divers (loons) glided. Following a narrow, circuitous road down to the edge of the waters of the North Atlantic we took small boats over to Handa, a lonely island of 800 acres uninhabited except by a few sheep and many birds. Here barren cliffs rise 400-500 feet out of the Great Minch. The rugged terrain, wet and spongy with peat and sphagnum moss, the treacherous, grass-grown holes and bogs, and the spectacle of spiraling skylarks ascending to almost invisible heights, slowed our pace in climbing to the cliffs. Arriving there, an icy but refreshing gale blowing in our faces, we looked with fascination at the innumerable birds, the awesome cliffs, and the swirling waters in the sea caves below. Here on the narrow ledges, in the crevices, and in the air above thronged an estimated 4,000 fulmars, 14,000 kittiwakes, 12,000 razorbills, 50,000 guillemots, plus a few hundred puffins. Here they nested and squawked and squabbled and flew in endless, restless commotion, and as we crossed the rough, gray waters back to the mainland black guillemots paddled beside us. A fine mist began to caress us, and shortly the wild island of Handa, which some 100 years ago was deserted by seven families who emigrated to America, was swathed in a heavy fog.

BASS ROCK

From North Berwick near Edinburgh to Bass Rock is only one-half hour's ride by boat. Bass Rock is just a barren, rocky protuberance in the Firth of Forth, but its colony of gannets has been observed for a thousand years and the species name, *Sula bassana,* is derived from the name of the island. Here the ledges are alive with some 20,000 gannets and hundreds of shags, guillemots, and puffins. The day was sunny, the water fairly quiet. The small boat was able to edge into one of the sea caves, so close to the birds that we could almost reach out and touch them. Some of the birds sat preening themselves, the shags glowing an iridescent green-black in the sunlight. Some flew restlessly back and forth or scrambled for space in the sun. Some were attentive to their fuzzy young which were of various sizes and ages. Some sat on their flimsily made nests, still incubating. The air was rent with noisy clatter of rasping croaks and squawks and hisses.

We were accompanied on the Bass Rock excursion by Dr. John Berry, Director of Nature Conservancy in Scotland, and by Mr. George Waterston, head of the Scottish Division of the R.S.P.B. Once back on the mainland we stopped at Tantallon Castle. Here in the shallow waters about the old ruins were eider ducks. Several pink-breasted males in company with their mates sat sunning themselves on the sand edging the water. They were resting from family cares while another eider, assigned nursemaid duty, chaperoned a group of 18 youngsters on a swimming party.

Later, Mr. and Mrs. Waterston were host and hostess at the headquarters of the R.S.P.B. in Edinburgh at which time we were shown two films: The Return of the Osprey to Britain and another showing the habitat and habits of a pair of nesting golden eagles as observed for 50 continuous hours by Mr. Waterston and his co-worker in a hide in the Scottish highlands.

These films were a fitting climax to our British Nature Tour. During a strenuous two weeks we had seen many species of birds of varying habitats, had become acquainted with some of the problems of conservancy in Britain and some of the methods being used to solve them, and we had drunk deeply of the cup of inspiration offered us by many eminent naturalists of the United Kingdom.

500 West Avenue
North Augusta, South Carolina

> [Miss Buckner is a teacher by profession, and she has been a member of CBC for about seven years. Further details about the trip described in this article may be obtained from Orville W. Crowder, 4919 Hampden Lane, Bethesda 14, Maryland.]

Backyard Birding

Annie Rivers Faver
Department Editor

Hummers Feast at Hilton Head

Our home, surrounded by pines, palmettos and sea-oats, is on the ocean front on Hilton Head Island. We maintain feeders for all species of birds. Cardinals, doves, quail, Boat-tailed Grackles, red-wings, Brown Thrashers, Painted Buntings, various sparrows and Ruby-throated Hummingbirds like our menu.

When we added an open second story deck we moved our hummingbird feeders to the topmost of its two railings. We use the Audubon flower type and hamster feeders, placed so that the outlets are available to perchers on the lower railing.

Our hummers liked the new arrangement. Our first bird zeroed in on March 26, 1964. He tried to seize the entire air and feeding rights but was soon overwhelmed and forced, in ruffled resignation, to defend one feeder. Other selfish, fiery individuals staked out claims to other feeders which they guarded from dawn to dusk. At best count, we had a swarm of from twenty to thirty birds in aerobatic melee. As one squatter would take off after an intruder, more timid birds would rush in to drink.

All this twittering activity aroused the curiosity of other species. Inqusitive young Cardinals eased into the commotion and began to suck up drippings. They soon learned to drink directly from the hamster feeders. Relatives joined them for dessert. Despite their valor, the discreet ruby-throats left most of the larger birds alone. Next, a female Orchard Oriole became a regular customer. She was followed by a Black-throated Blue Warbler and a Yellow Warber. A Carolina Wren, perhaps an illiterate from some Tobacco Road, tried often to solve the feeders, but never learned.

The hummers became so fearless that hunger and anger at slow service drove them to drinking from feeders that we held in our hands! Friends that we invited to see our daily air show were fascinated. One lady, after having been buzzed several times, understandably inquired, "Will they sting?"

Summer wore on and our flyers began to leave, until on one early October day, we had only three reluctant laggards for meals. On October 9, the last boarder left us to loneliness. The ruby-throats consumed much of our time, sugar and honey. But come next March, our deck will be cleared and ready for action.

Mildred and Henry Lawrence
Sea Oak Lane
Hilton Head Island, South Carolina

The Great Hope Realized

For twelve years "The Great Hope" (as Mr. Peterson calls it) of seeing an unusual bird, and being correct as to its identification, has been in my mind every time I raised my binoculars. Finally on Sunday morning, September 27, 1964, about eleven o'clock, this hope was realized.

We were sitting in the breakfast room watching an Ovenbird feeding on the lawn along with our regular birds, when my husband, who has an eye like an eagle, calmly said: "There's a different kind of sparrow out there fixing to drink water." Instinctively I focused on the bird-bath and caught the bird with his back to me. It was definitely a sparrow, but seeing a lot of white in its tail, didn't know whether to call it a Vesper or not, so—as my good friends John and Mary Leigh Watkins had taught me to temper snap judgment with caution—I kept on looking. In a few seconds the bird turned and there to behold was the beautiful quail pattern head and pearly breast with black stickpin. Although I had never seen this bird before, except in Peterson's Field Guide, I knew it *HAD* to be a Lark Sparrow.

While I was calling the Watkins to hasten over and verify the identification, my husband announced that a dog had scared every bird off of the yard. Finally, in what proved to be its established pattern for four days, we found it feeding with the Chipping Sparrows on Bermuda grass, and the Watkins confirmed it to really be the Lark Sparrow. During the time the bird was here it was always found feeding wherever the Chippies fed. Its behavior was like that of the Chippies. When the Chippies flew into an apple tree, under which they seemed to feed more than anywhere else, the Lark Sparrow would fly into the apple tree. There he would preen himself, proudly spread those lovely white tail feathers, stretch one leg then the other, and after a few hops among the branches, down he'd fly, back to his search with the Chippies for more grass seeds.

The second day I had the sprinkler running on some azaleas near where they were feeding, and that little Lark Sparrow had the time of its life playing with the Chippies under the bushes and on the grass as far out as the water sprayed. (Needless to say I nearly drowned those azaleas.) Many times I watched at such close range there was no need for binoculars.

On the fifth day, while I was away from home for a few hours the yard men mowed the bermuda grass (against my orders) and the Chippies left and so did the Lark Sparrow.

Louise E. Spivey (Mrs. J. E.)
1122 Woodburn Road
Spartanburg, S. C.

Favorite Foods at Feeders

Jay Shuler of Greenville writes that he is gathering material for a cookbook for birds. He says, "I wonder if your readers would like to send me their favorite recipes. I find that most Backyard Birders have their own special preparations and like to share them. So far in my project I have really been amazed at the ingenious recipes and methods bird-watchers have devised."

Answer directly to Mr. Shuler at 43 Kirkwood Lane, Greenville, South Carolina.

CHRISTMAS COUNT—1964		COAST				COASTAL PLAIN								PIEDMONT										MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Hyde Co., N. C.	Beaufort Co., N. C.	New Bern, N. C.	Wayne Co., N. C.	So. Pines, N. C.	Dillon, S. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Albemarle, N. C.	Charlotte, N. C.	Anderson, S. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Lenoir, N. C.	Tryon, N. C.	Jackson Co., N. C.	Great Smoky Mtn. National Park Tenn.-N. C.
Common Loon	118	8	47	47	10	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Red-throated Loon	26	*	6	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Horned Grebe	179	28	18	84	23	20	1	2	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Pied-billed Grebe	166	12	29	25	8	6	6	14	11	10	1	..	14	..	9	3	16	..	..	*	*	1	..	..	1	..
Brown Pelican	60	18	21	1	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gannet	48	6	22	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Double-cr. Cormorant	221	10	164	29	14	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Anhinga	4	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Great Blue Heron	177	41	40	30	22	13	1	2	1	*	1	1	2	2	1	2	12	4	..	1	1	..	..	..	..	..
Green Heron	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Little Blue Heron	18	1	2	5	9	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cattle Egret	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Egret	105	1	45	14	34	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Snowy Egret	33	1	3	10	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana Heron	37	5	3	14	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-cr. Night H.	62	32	4	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yel.-cr. Night H.	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White Ibis	13	..	..	2	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whistling Swan	2,128	..	..	..	..	2000	128	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada Goose	45,400	1	6	30	..	45000	..	10	5	..	..	..	..	..	..	..	1	12	..	..	335	..	..	..	..	..
Snow Goose	200	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Goose	2,000	..	..	..	..	2000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fulvous Tree Duck	9	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mallard	3,755	2	230	82	82	3000	36	16	5	..	..	4	..	14	26	3	33	136	8	4	71	2	1	..	..	..
Black Duck	4,240	12	100	50	14	4000	..	5	..	..	..	..	..	..	8	..	17	30	..	..	4	..	..	..	..	..
Gadwall	2,121	..	15	97	..	2000	..	..	..	..	..	..	..	..	2	..	7	..	..	..	..	..	..	..	..	..
Pintail	20,472	*	200	259	4	20000	..	5	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..
Gr.-winged Teal	7,294	..	1200	76	8	6000	..	..	*	..	..	..	..	..	2	..	2	6	..	..	..	..	..	..	..	..
Bl.-winged Teal	129	..	10	16	1	100	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..
Am. Widgeon	2,513	..	5	290	40	2000	138	..	..	..	..	..	..	..	7	..	30	3	..	..	..	..	..	..	..	..
Shoveler	304	..	50	252	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood Duck	74	..	6	17	18	..	1	30	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Redhead	43	40	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ring-necked Duck	618	..	100	150	1	..	75	6	*	11	..	3	..	..	237	3	30	2	..	*	..	..	..	..	..	..
Canvasback	305	10	16	250	..	..	25	..	..	..	..	..	..	..	..	..	3	..	..	*	1	..	..	..	..	..
Scaup (sp.)**	6,186	8	1	3209	921	2000	5	20	..	3	..	..	6	..	6	..	5	1	..	1	..	..	..	..	..	..
Common Goldeneye	13	..	..	6	1	..	..	6	*	..	..	..	..	..	..	..	..	..	..	*	..	..	..	..	..	..
Bufflehead	1,481	23	187	188	19	1000	21	3	..	..	..	..	..	..	12	..	27	1	..	..	..	..	..	..	..	..
Oldsquaw	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harlequin Duck	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
White-winged Scoter	301	..	1	300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surf Scoter	32	4	..	1	7	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Scoter	2,372	17	2	2000	253	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Duck	1,591	285	10	150	6	1000	132	..	..	1	..	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..
Hooded Merganser	124	..	16	11	20	..	..	..	3	..	..	..	4	60	1	..	5	..	..	4	..	..	..	..	..	..
Red-br. Merganser	452	25	327	75	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Turkey Vulture	233	..	2	47	98	..	..	1	*	*	..	..	..	10	4	24	22	15	..	2	1	..	..	6	1	..
Black Vulture	262	..	*	49	164	..	..	1	6	4	*	1	12	6	4	9	1	2	..	3	..	..	..	..	..	..
Sharp-sh. Hawk	12	..	2	1	2	1	..	..	..	*	..	..	..	..	2	1	..	..	..	..	..	..	1	1	..	1
Cooper's Hawk	11	..	..	2	..	1	..	..	..	..	..	..	..	..	1	..	1	1	..	*	..	1	..	2	1	1

CHRISTMAS COUNT—1964	Individual Totals	COAST				COASTAL PLAIN								PIEDMONT										MOUNTAIN		
		Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Hyde Co., N. C.	Beaufort Co., N. C.	New Bern, N. C.	Wayne Co., N. C.	So. Pines, N. C.	Dillon, S. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Albemarle, N. C.	Charlotte, N. C.	Anderson, S. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Lenoir, N. C.	Tryon, N. C.	Jackson Co., N. C.	Great Smoky Mtn. National Park Tenn.-N. C.
Red-tailed Hawk	103	1	7	11	19	..	4	1	3	2	1	2	..	2	5	6	7	11	3	7	3	..	..	3	2	3
Red-shouldered H.	39	..	3	5	10	..	..	*	..	..	..	9	3	..	2	3	2	..	..	*	1	..	..	..	..	1
Broad-winged H.	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..	..	..	..	..	..	..	..
Bald Eagle	4	..	..	*	.	3	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Marsh Hawk	59	3	6	8	15	7	2	1	..	..	2	1	1	..	2	2	..	1	2	5	1	..	..	..	..	..
Osprey	9	..	..	3	6	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..
Peregrine Falcon	1		.	..	1	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..
Pigeon Hawk	2	..	..	..	.	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Sparrow Hawk	273	27	19	11	63	39	32	5	10	6	4	2	1	2	4	16	4	8	4	10	1	..	..	..	..	5
Ruffed Grouse	5	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3
Bobwhite	655	3	23	9	60	..	1	3	16	..	7	21	2	1	41	139	57	106	*	57	34	6	16	38	..	15
Turkey	*	..	*	*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
King Rail	3	..	.	.	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clapper Rail	183	28	47	80	28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Gallinule	11	.	1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Coot	3,181	..	101	622	15	2000	265	*	2	..	..	17	..	..	1	..	158	..	..	..	..	..	..	..	..	..
Am. Oystercatcher	747	6	69	665	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Plover	194	1	1	31	161	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Piping Plover	25	..	4	4	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killdeer	464	50	37	.	40	24	1	10	35	33	6	19	26	..	7	17	37	2	30	28	..	..	2	..	..	60
Bl.-bellied Plover	993	12	142	711	128	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ruddy Turnstone	288	2	.	159	127	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Am. Woodcock	19	*	2	7	..	3	..	..	..	..	2	..	..	..	..	..	..	1	1	*	..	..	..	..	..	3
Com. Snipe	138	*	13	29	1	7	..	25	*	20	..	..	2	..	2	8	4	1	9	6	..	..	..	10	..	1
Whimbrel	39	..	.	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Spotted Sandpiper	10	..	.	2	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Willet	1,625	16	41	1511	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Greater Yellowlegs	64	27	18	13	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lesser Yellowlegs	42	4	2	36		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Knot	11	.		1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Sandpiper	38			.	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunlin	1,162	87	508	75	492	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dowitcher (sp.)**	986	4	12	905	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Semipalmated Sandp.	135	*	64	..	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Sandpiper	610	..	561	4	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marbled Godwit	252	.	2	250	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sanderling	236	26	42	11	157	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..
Gr. Bl.-backed Gull	38	15	14	2	.	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herring Gull	2,710	750	982	120	191	144	19	470	..	..	..	..	..	..	..	..	..	7	..	27	..	..	..	..	..	..
Ring-billed Gull	4,655	1000	1121	336	148	203	612	325	..	..	..	22	..	500	..	..	..	61	300	27	..	..	..	..	..	..
Laughing Gull	244	107	101	8	28	..	..	..	..	..	..	..	..	..	..	..	..	.	..	...	..	..	..	..	..	..
Bonaparte's Gull	67	9	4	9	28	1	..	..	..	..	..	..	..	16	..	.	..	..	..	..	..	..	..	..	..	..
Gull-billed Tern	2	..	2	..	.	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..
Forster's Tern	214	36	88	2	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Tern	19	..	19	*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Least Tern	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Royal Tern	15	6	3	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Caspian Tern	15	1	5	7	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black Skimmer	18	..	1	..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mourning Dove	3,148	12	336	23	240	7	103	6	105	113	36	29	67	77	237	96	199	203	205	146	564	8	131	55	3	147

Ground Dove	7	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Owl	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	3	..	..	..	..	..	..
Screech Owl	14	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	9	..
Gr. Horned Owl	18	..	6	3	..	..	..	..	..	..	1	..	..	..	1	..	2	1	..	..	*	2	1	*	1	..
Barred Owl	20	..	1	5	1	..	..	..	..	..	..	..	..	..	2	2	3	1	*	2	..	..	..	*	3	..
Ruby-th. Hum'bird	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Belted Kingfisher	161	9	20	40	26	6	5	5	3	3	*	1	3	1	6	1	7	2	2	1	3	1	..	2	3	11
Yel.-sh. Flicker	1,106	37	89	181	288	47	25	33	15	16	22	30	49	13	58	40	45	31	25	9	13	13	13	4	6	4
Pileated Woodp.	107	1	..	29	15	4	1	2	2	..	2	2	..	..	..	*	2	..	..	1	7	*	1	19	3	16
Red-bellied Woodp.	430	3	25	45	56	7	14	8	10	11	6	9	10	8	35	36	38	21	39	9	7	2	6	17	2	6
Red-headed Woodp.	38	1	11	1	4	..	4	3	..	..	..	2	2	*	6	*	1	1	..	1	..	..	..	1	..	..
Yel.-bel. Sapsucker	191	*	6	34	41	1	3	3	2	6	3	2	8	*	10	17	16	8	6	4	6	1	1	3	1	9
Hairy Woodpecker	96	..	4	5	9	3	1	2	..	*	2	2	2	..	8	17	6	6	3	3	2	1	1	11	1	7
Downy Woodpecker	354	1	9	15	23	8	3	10	6	11	1	7	4	7	21	38	50	19	14	7	9	7	7	28	5	44
Red-cock. Woodp.	17	..	..	8	..	1	3	..	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..
Eastern Phoebe	92	1	2	12	29	2	9	*	1	*	*	..	4	..	7	2	..	4	1	*	3	..	..	6	2	7
Horned Lark	247	..	..	..	..	..	..	..	..	*	..	..	..	..	2	..	165	35	..	14	8	3	20	..	..	..
Tree Swallow	122	..	50	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barn Swallow	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blue Jay	1,119	15	122	47	39	..	34	27	27	16	11	109	33	20	223	52	90	41	94	61	3	4	30	3	6	12
Common Raven	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
Common Crow	2,105	6	28	530	157	78	..	13	5	1	*	16	9	31	64	195	232	85	54	36	213	17	30	34	20	251
Fish Crow	2,321	2	12	1318	635	350	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Black-capped Chickadee	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Car. Chickadee	1,375	23	21	72	96	13	23	29	20	10	8	28	9	22	111	83	193	84	91	42	27	7	25	116	48	174†
Tufted Titmouse	1,019	3	19	34	31	..	18	32	17	7	2	5	6	18	133	69	111	74	78	32	19	9	30	105	27	140
White-br. Nuthatch	200	..	..	1	..	..	4	3	*	3	2	1	3	5	15	29	28	14	6	3	5	3	6	38	16	15
Red-br. Nuthatch	12	..	..	1	..	..	..	..	..	..	..	..	..	..	1	*	2	..	..	..	..	..	..	*	..	8
Brown-hd. Nuthatch	225	..	20	23	1	..	9	7	..	15	4	11	9	16	39	10	32	15	8	4	..	..	..	2	..	..
Brown Creeper	91	..	1	26	..	..	2	..	1	1	*	1	2	1	3	13	11	3	5	..	2	..	1	3	3	12
House Wren	19	2	5	6	3	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Wren	44	..	1	5	3	1	..	..	..	..	2	1	8	..	5	4	..	1	..	2	..	1	..	3	1	6
Bewick's Wren	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Carolina Wren	594	2	52	65	35	11	7	15	6	5	1	11	9	12	43	47	35	35	10	12	24	18	35	41	10	53
Long-bil. M. Wren	11	*	8	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Short-bil. M. Wren	12	..	4	1	6	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mockingbird	1,305	45	135	24	114	12	29	19	16	36	10	38	13	19	176	76	206	90	93	24	19	5	29	17	8	52
Catbird	31	1	10	3	5	7	..	*	1	1	..	..	..	..	3	..	..	..	..	..	..	..	..	*	..	..
Brown Thrasher	203	17	30	40	20	5	1	8	3	3	2	16	14	2	16	9	4	1	1	9	..	..	..	*	1	1
Robin	5,347	75	1061	195	235	2000	55	54	50	73	25	88	905	7	56	23	3	10	45	15	133	12	97	3	43	84
Hermit Thrush	100	..	10	6	5	..	..	5	2	2	*	1	15	..	4	4	..	7	1	2	5	13	4	1	4	9
Swainson's Thrush	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Eastern Bluebird	574	*	*	11	56	..	30	28	25	31	10	8	20	6	50	79	25	50	18	11	29	9	13	17	2	46
Bl.-gray Gnatcatcher	26	..	3	4	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Golden-cr. Kinglet	154	..	4	20	..	..	5	2	*	1	..	3	16	..	7	4	5	1	9	1	4	..	..	24	6	42
Ruby-cr. Kinglet	474	3	32	117	36	4	34	14	10	10	10	28	19	26	24	14	14	15	11	10	5	..	..	21	5	12
Water Pipit	116	..	50	15	9	..	..	..	..	..	*	..	3	..	..	..	..	10	..	1	28	..	..	..	..	..
Cedar Waxwing	2,005	..	450	26	20	322	225	..	*	23	53	7	190	77	151	177	15	62	2	..	136	50	..	..	16	3
Log. Shrike	386	3	15	16	35	..	4	7	10	7	8	9	3	13	74	28	41	28	23	15	14	3	6	6	..	18
Starling	87,391	350	1065	275	195	2000	150	1064	88	62	107	339	25825	750	13007	373	3147	360	1825	30000	5000	223	475	60	39	612
White-eyed Vireo	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Solitary Vireo	4	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bl.-and-wh. Warbler	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Orange-cr. Warbler	1	*	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Myrtle Warbler	6,801	75	608	186	223	5000	177	324	15	10	20	3	7	17	9	66	26	6	17	2	2	*	2	..	..	6
Yellow-throated W.	8	..	1	3	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	*	..	..
Pine Warbler	194	1	5	74	8	..	5	12	1	8	2	24	4	3	7	23	5	2	5	5	..	..	..	..	..	..
Prairie Warbler	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palm Warbler	72	4	5	11	10	..	..	13	20	*	5	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Yellowthroat	30	..	4	14	9	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..

CHRISTMAS COUNT—1964		COAST				COASTAL PLAIN								PIEDMONT										MOUNTAIN		
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Hyde Co., N. C.	Beaufort Co., N. C.	New Bern, N. C.	Wayne Co., N. C.	So. Pines, N. C.	Dillon, S. C.	Columbia, S. C.	Aiken, S. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Albemarle, N. C.	Charlotte, N. C.	Anderson, S. C.	Elkin, N. C.	N. Wilkesboro, N. C.	Lenoir, N. C.	Tryon, N. C.	Jackson Co., N. C.	Great Smoky Mtn. National Park Tenn.-N. C.
Yellow-br. Chat	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House Sparrow	5,849	100	474	11	1	55	95	179	81	110	8	252	85	102	1165	51	889	615	295	500	221	26	325	2	34	173
E. Meadowlark	4,552	57	867	106	506	76	87	24	54	73	37	325	35	57	364	249	383	246	217	204	210	94	137	33	9	102
Red-winged Blackbird	74,193	75	452	810	1701	20000	592	438	18	96	50	2012	7430	87	156	100	36	..	1	40000	..	75	60	..	..	4
Baltimore Oriole	158	..	6	1	..	..	7	17	70	21	*	..	..	9	11	3	..	9	4	..	..	..	..	..	..	..
Rusty Blackbird	3,833	50	..	70	258	..	9	21	7	..	200	3	63	..	..	50	..	36	..	3000	..	65	..	..	..	1
Boat-tailed Grackle	601	83	194	110	214	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Grackle	111,517	400	450	639	163	5000	1	19	2	4	613	327	73625	..	12	50	156	..	49	30000	*	5	..	2	..	..
Br.-hd. Cowbird	11,022	..	39	..	15	15	1	400	100	..	275	50	7855	..	..	..	252	..	..	2000	..	..	20	..	..	..
Cardinal	2,728	12	142	64	290	..	29	107	57	47	16	71	41	36	191	183	356	271	168	24	47	21	143	134	57	221
Dickcissel	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Evening Grosbeak	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	1	..	..	..	..
Purple Finch	204	..	6	7	14	..	..	4	14	9	..	3	..	7	22	20	51	2	4	6	19	3	11	2	..	..
Pine Grosbeak	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Redpoll	*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	*	..	..	..
Pine Siskin	16	..	..	..	..	..	..	..	..	..	..	..	..	..	12	4	..	..	..	..	..	..	..	..	..	..
Am. Goldfinch	839	6	28	43	36	..	7	3	2	30	5	81	15	14	13	49	232	21	92	50	13	3	3	14	14	65
Ruf.-sided Towhee	1,157	18	178	172	108	18	13	12	12	19	7	64	11	15	140	53	56	36	58	63	28	8	35	26	3	4
Ipswich Sparrow	3	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savannah Sparrow	607	12	162	22	41	24	15	20	40	4	125	56	19	2	12	5	..	2	1	33	5	..	..	..	2	5
Sharp-tail. Sparrow	21	12	2	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Seaside Sparrow	69	26	22	10	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vesper Sparrow	401	175	1	25	119	..	..	..	4	..	11	4	13	..	6	..	6	11	..	25	1	..	..	..	..	..
Slate-colored Junco	6,232	17	322	353	126	..	423	148	225	180	55	140	68	185	379	638	628	618	594	77	171	91	67	204	122	401
Oregon Junco	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Chipping Sparrow	406	..	22	26	143	..	32	3	2	9	..	130	31	..	3	..	..	..	1	..	..	..	..	4	..	..
Field Sparrow	2,216	12	257	6	148	3	17	78	13	19	13	21	7	20	85	37	629	98	85	194	36	18	24	164	36	196
White-cr. Sparrow	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2	12	1	2	..	..	..
White-thtd. Sparrow	5,159	125	632	337	627	52	95	243	106	61	15	168	145	125	206	405	370	180	319	287	161	39	123	142	35	161
Fox Sparrow	232	47	3	17	6	1	2	42	10	1	8	4	..	9	8	20	6	3	8	..	14	8	7	3	..	5
Swamp Sparrow	396	1	39	111	10	23	3	17	11	..	1	2	45	6	23	8	51	7	2	29	1	..	2	..	1	3
Song Sparrow	2,043	37	260	99	59	150	15	38	17	18	34	47	68	33	70	68	366	74	32	173	61	26	55	56	52	135
Total number species	190	92	140	147	135	75	71	69	62	54	51	65	61	48	78	63	74	77	53	66	55	44	43	48	48	57
Total number individuals	481,613	4,769	15,872	20,241	11,474	128,226	3,945	4,522	1,409	1,278	1,852	4,699	116,903	2,471	17,885	3,867	9,712	3,985	4,978	107,338	7,744	907	1,999	1,488	669	3,380

* Seen in area during count period but not on count day.
** See text for species.
† Includes some Black-capped Chickadees.

CHRISTMAS BIRD COUNT—1964

ELOISE F. POTTER

The 1964 Christmas Bird Count must surely rank as one of the best in the history of Carolina Bird Club even though the total number of species (190) is six less than the all-time high of 196 species found in 1963. The count period of 22 December through 3 January was marked by unusually mild temperatures for the season. While a few compilers mentioned fog, rain, and high winds, only those observers in the field on 3 January experienced any really unpleasant weather conditions. Most counts were made with temperatures ranging from a low well above freezing to a high of 50-70°. In the 25 counts tabulated, 388 observers spent 972¼ party-hours in the field covering 3,666 party-miles. Perhaps this unusually thorough coverage was a result of the mild weather.

Noteworthy observations include a **Harlequin Duck** at Carolina Beach in the Wilmington count area, the third sight record for North Carolina, and two **Pine Grosbeaks** at Charleston, a second sight record for South Carolina. For further details see the General Field Notes and the local count summaries.

An **Oregon Junco** observation is described in the Jackson County count summary. There are two previous records from North Carolina, a sight record from Greensboro (*Chat,* 12:52) and a specimen taken at Zebulon (*Chat,* 24:27-28). Peterson's Field Guide (p. 255) gives the occurrence of the Oregon Junco in the East as frequent enough to be considered "rare rather than accidental" in winter. A survey of the 1963 Christmas Bird Count reports in *Audubon Field Notes* (Vol. 18, April 1964) gives some indication of frequency in the northeastern United States. Thirty-one Oregon Juncos were recorded on count days and distributed as follows: Massachusetts, 7; Rhode Island, 2; Connecticut, 4; New York, 7; New Jersey, 6; and Pennsylvania, 5. One to three of these birds were found in 20 of the 125 count areas in the six states listed, or in a surprising 16% of the count areas, which indicates that the Oregon Junco is seen in the northeast considerably more often than many other wanderers from the West such as the Bullock's Oriole and Green-tailed Towhee.

Also of particular interest in the present count are the 11 **Broad-winged Hawks** seen at Chapel Hill, apparently the first winter record of the species in North Carolina. Another unexpected report is the **Red-cockaded Woodpecker** at Tryon. In his *Notes on the Birds of the Great Smoky Mountains National Park* (1963), Arthur Stupka mentions several records of the species in the mountains of Tennessee, but records from western North Carolina are decidedly rare. In fact, the bird found in Polk County may well constitute the westernmost record for North Carolina. For further details see the local count summaries.

CHANGES IN COUNT TABLE

Recently the Christmas and Spring Bird Counts have been tabulated with the locations grouped under headings indicating the geographical regions: Coast, Coastal Plain, Piedmont, and Mountain. In the 1963 Christmas Count table the count areas were arranged arbitrarily from north to south within their respective regions with areas of about the same latitude placed in order from east to west. The present table follows the same general system, but with some refinements which may make the arrangement more logical and meaningful.

COAST—By definition these count areas must contain some ocean front.

COASTAL PLAIN—These count areas range in elevation from sea level (without ocean front) to 500 feet. Grouped first under this heading are the areas having the brackish water of sounds or tidal rivers (Hyde County, Beaufort County, and New Bern, North Carolina). These are followed by the inland Coastal Plain count areas arranged from north to south. The Carolina Sandhills region is classified as Coastal Plain.

PIEDMONT—This heading includes areas west of the "fall line" and generally between 500 and 2,000 feet in elevation. Grouped first are the Piedmont areas below 500 feet (Henderson and Raleigh), next those between 500 and 1,000 feet, and finally those above 1,000 feet—which might be called Upper Piedmont or "foothills" (Elkin, North Wilkesboro, and Lenoir, North Carolina).

MOUNTAIN—Generally these count areas are above 2,000 feet in elevation. Where there is little difference in latitude areas are listed from the lower to the higher levels of elevation. The Tryon count area is unusual in that it contains elevations from 900 to 3,100 feet and is about half Piedmont and half Mountain. In view of the area's proximity to Jackson County and the Great Smoky Mountains, it seems logical to group Tryon with these Mountain areas rather than with the Upper Piedmont localities.

Another innovation is the use of the asterisk (*) in the table to indicate a species seen in the count area during the count period, but not found on the count day. It is hoped that this practice will give an improved picture of species distribution in the Carolinas. The asterisks are not counted in any of the totals, but any unusual sight record represented by an asterisk will be detailed in the local count summary.

Aiken, S. C. (all points within a 15-mile diameter circle centered Aiken Training Track; swamps and ponds 45%, fields and pasture 25%, mixed woods 20%, pine woods 10%).—23 Dec.; 6 AM to 5:30 PM. Overcast, fog; temp. 46°-61°; wind SE, 7-14 mph. One observer. Total party-hours, 11.5, (2 by car, 9.5 on foot); total party-miles, 90 (85 by car, 5 on foot). **Total species, 61; total individuals, 116,903.**—William Post Jr.

Albemarle, Stanly Co., N. C. [Formerly New London]. (all points within a 15-mile diameter circle centered two miles NW of Badin; mixed deciduous woodlands 25%, open fields and farm land 27%, lakes and rivers 15%, pond and lake shores 25%, marsh 3%, pine woods 2%, suburbs 3%).—30 Dec.; 6:30 AM to 5:30 PM. Fog, mostly fair; temp. 34-66°; wind SW, 5 mph. Thirteen observers in 6 parties, 14 individuals working own yards. Total party-hours, 41.5 (20.5 by car, 5.5 by boat, 15.5 on foot); total party-miles, 237 (193 by car, 32 by boat, 14.5 on foot). **Total species, 77; total individuals, 3,785.** This is the highest number of species ever obtained on a winter count in this area, but the total number of individuals is much less than usual. The Horned Grebe is new for area. Lesser Scaup recorded. **Bald Eagle** was seen in the Badin Lake area. Bluebird count is highest recorded in several years. **Evening Grosbeaks** were in Winget yard and were first reported in county this winter.—Mr. and Mrs. Roy Blalock, Barrett Crook, Mrs. Barrett Crook (compiler), Joe Ferebee, Mr. and Mrs. Rudolph Gereg, Susan Green, C. M. Haithcock, Mr. and Mrs. Louis Hartung Jr., Mrs. Claude Hinson, Myrtle Isenhour, Mrs. Kemp Littleton, Donald Maner, Vera Mason, Doris Mauney, Harold Morris, Mrs. Heath Morgan, Mrs. William Mount, Mrs. A. J. Rice, Spencer Plyler, Mr. and Mrs. John Trott, Mr. and Mrs. John Whitlock, Mrs. Bennie Winget.

Anderson County, S. C. (all points within a 15-mile diameter circle centered at Anderson Airport, including Hartwell backwaters, City of Anderson, towns of Starr and Sandy Springs; open fields 20%, deciduous woods 15%, pine woods 20%, mixed woods 15%, ponds and creeks 5%, town 15%, Hartwell 10%).—2 Jan.; 5:45 AM to 6:00 PM. Partly cloudy with afternoon showers; temp. 46-58°; wind WbSW, 0-20 mph. Nine observers in 4 parties, 2 individuals working own yards. Total party-hours, 21 (7 by car, 2 by boat, 12 on foot); total party-miles, 148 (115 by car, 25 by boat, 8 on foot). **Total species, 66; total individuals, 107,338.** The species count seemed poor considering the favorable weather. The blackbird count is down considerably from previous years because the major roost at Boscobel Country Club has been destroyed by the cutting of the bamboo patches. Lesser Scaup recorded. Percentages of habitats in area have been altered to allow for growth of residential area and extensions of city limits.—Ed Brown, Mrs. R. C. Brownlee, J. D. Copeland, Mrs. Rufus Fant, Mrs. A. A. Hutchinson, Arthur Klugh, Barbara Ramseur, Adair M. Tedards (compiler), Douglas Tedards, R. C. Tedards, Reggie Titmas.

Beaufort County, N. C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County, including both sides of the river from Bath to Washington; river and shore 40%, fields 30%, mixed woods 20%, pine woods 5%, feeders 5%).—3 Jan.; 7 AM to 5 PM. Very windy; temp. 39-50°; wind gusty to 28 mph. Nine observers in 2 parties, 4 individuals working own yards. Total party-hours, 18 (9 by car, 9 on foot); total party-miles, 106 (98 by car, 8 on foot). **Total species, 71; total individuals, 3,945.** The female Ruby-throated Hummingbird (EB, LS) was our only exceptional observation. The bird was seen within 15 feet feeding on Breath of Spring. The wind was blowing straight down the river and all the water was going with it. Tide exceptionally low, water very muddy, and whitecaps rolled along with every wave. It was not possible for the Wildlife plane to make a low flight because of the wind. On 30 December the river was full of waterfowl, but rough water drove birds elsewhere.—Ethel Barkley, Geraldine Cox (compiler), Sandra Edwards, Jesse Hawkins, James McLaurin, Mary McLaurin, Ethel Mizelle, Tommie Mizelle, Louise Satterthwaite.

Chapel Hill, N. C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin Streets; mixed deciduous woodlands 25%, open fields and farm lands 30%, pond, lake shores and creek banks 25%, pine woods 5%, wooded residential 15%).—3 Jan.; 6:30 AM to 5 PM. Partly cloudy; temp. 35-47°; wind NW, 5-20 mph, gusty. Thirty-two observers in 10 parties, 5 individuals working own yards. Total party-hours, 54 (18 by car, 36 on foot); total party-miles, 80 (55 by car, 25 on foot). **Total species, 63; total individuals, 3,867.** A soaring flight of 11 **Broad-winged Hawks** was observed by MLT and DB at long range through binoculars for about 10 minutes. Seen at the same time were a Red-tailed Hawk and a Red-shouldered Hawk, both clearly distinguishable from the other 11 birds. While this is apparently the first winter record of the Broad-winged Hawk in North Carolina, the species has been found on Christmas Counts in the northeastern states (*Audubon Field Notes*, 18:111,114,122) and in South Carolina (*Chat*; 26:3).—David Barnes, C. D. Beers, Mr. and Mrs. C. H. Blake, W. T. Dye, Mr. and Mrs. A. Fristoe, C. S. George, R. H. Helle, Mr. and Mrs. J. L. Irvin, Mr. and Mrs. G. R. MacCarthy, Mrs. W. D. Patterson, Wallace Patterson, Mr. and Mrs. W. B. Sanders, Mr. and Mrs. D. Seanor, Mr. and Mrs. R. B. Sharpe, Mrs. P. Stewart, Mr. and Mrs. R. P. Teulings (compilers), Mr. and Mrs. M. L. Thompson, Mrs. H. W. Walters, Mrs. F. Weedon, Edmund Welch, Frances Yocom, Mr. and Mrs. D. Yount.

Charleston, S. C. (all points within a 15-mile diameter circle centered 14 miles NE of Mt. Pleasant and ½ mile E of U. S. hwy 17; ponds and wooded swamps 25%, mixed and pine woods 25%, fields and farm land 20%, salt-water creeks and marshes 25%, beach and ocean 5%).—2 Jan.; 5 AM to 5 PM. Mostly sunny; temp. 45-75°; wind WbSW. 5-20 mph. Twenty-nine observers in 8 parties. Total party-hours, 70.25 (11 by car, 16.75 by boat, 42.5 on foot); total party-miles, 285.5 (171 by car, 56 by boat, 58.5 on foot). **Total species, 147; total individuals, 20,241. Yellow-crowned Night Heron** rare in winter; immature compared directly with nearby immature Black-crowned Night Heron (JHD and party). **Baltimore Oriole** reported with apparently increasing frequency in winter (ELB). Two **Pine Grosbeaks** (females or immature males) were feeding on buds of maple and oak. Studied for 15-20 minutes at 125 feet with binoculars and 30x scope by all six party members; one member (LSS) familiar with species in Connecticut.—Mr. and Mrs. Roy Baker, Mr. and Mrs. Francis Barrington, T. A. Beckett III, Mr. and Mrs. E. L. Blitch, Mrs. Jack Button, B. R. Chamberlain, David Chamberlain, E. B. Chamberlain (compiler), N. A.

Chamberlain, Mrs. E. L. Clarke, E. C. Clyde, Mrs. R. H. Coleman, Teague Coleman, Edmund Cuthbert, E. A. Cutts, J. H. Dick, Mrs. Lois Doscher, H. W. Freeman, J. H. Harrison, John Horlbeck, Peter Manigault, I. S. H. Metcalf, John Metcalf, Mrs. Margaret Retallack, Mrs. L. S. Smith, A. M. Wilcox.

Charlotte, N. C. (all points within a 15-mile diameter circle centered at intersection of 7th Street and Briar Creek as in past 22 years; deciduous-pine woods and edge 35%, open fields 40%, streams and ponds 15%, city yards 10%).—1 Jan.; 7:30 AM to 5:00 PM. Cloudy; temp. 45-51°; wind SE, 0-10 mph; ground bare, water open. Fifteen observers in 5 parties, 4 individuals working own yards. Total party-hours 32.5 (12.5 by car, 20 on foot); total party-miles, 205.5 (191 by car, 14.5 on foot). **Total species, 53; total individuals,** 4,978. Commercial and residential building in northeastern and southeastern sectors continue to occupy habitat at an alarming rate. The vultures were absent for the second consecutive year, and the absence of the Red-shouldered Hawk is evidence of a poor hawk day. The Ring-billed Gulls were again at the city dump.—Mrs. J. P. Armstrong, Mrs. M. J. Barber, Mrs. Douglas Booth, Mrs. Edwin O. Clarkson, Mrs. W. G. Cobey, Mr. and Mrs. Lloyd Davis, Mrs. Harold Dillehay, J. P. Hamilton, Anna B. Jewell, J. H. Lovell, Mrs. Willard W. McKeever, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Mrs. E. J. Presser, Susan Rapp, William Smith, Ruth Whyte, David B. Wright (Mecklenburg Audubon Club, guests).

Columbia, S. C. (all points within a 15-mile diameter circle centered at State Capitol, as in previous years; deciduous river and creek swamps 30%, pine woods 25%, fields 30%, lake shores 5%, urban 10%).—28 Dec.; 7:30 AM to 5:30 PM. Clear; temp. 42-63°; wind NW, 0-6 mph. Seven observers in 2 parties. Total party-hours, 17 (12 by car, 5 on foot); total party-miles, 44 (36 by car, 8 on foot). **Total species, 65; total individuals, 4,699.** We had the worst flooding condition we have ever experienced for a census. Much of the swamp area was inaccessible.—Gilbert Bristow (compiler), Mrs. Sanders Guignard, Mrs. Marshall McNamee, Robert Overing, Al Sanders, Kay Sisson, and Norma Smith.

Dillon, S. C. (all points within a 15-mile diameter circle centered at Dillon County Courthouse; swamps and deciduous forests 50%, open and planted fields 25%, pine woods 10%, mixed pine and deciduous woods 10%, ponds and lakes 5%).—25 Dec.; 6:45 AM to 5:00 PM. Variable cloudiness; temp. 60-70°; wind S, 10 mph, gusty. Three observers in 2 parties. Total party-hours, 9.25 (2.5 by car, 6.75 on foot); total party-miles, 34 (30 by car, 4 on foot). **Total species, 51; total individuals, 1,852.**—Arch McCallum (compiler), M. R. McCallum, M. R. McCallum Jr.

Elkin, Surry Co., N. C. (all points within a 15-mile diameter circle centered about 4 miles north of Elkin; open fields, lawns and pasture 60%, ponds and Yadkin River 10%, hedgerows in river flood plane 10%, woods 20%).—29 Dec.; 8:30 AM to 5:30 PM. Heavy fog until noon, partly cloudy in afternoon; temp. 32-45°; wind SW, 5-10 mph. Twelve observers in 4 parties. Total party-hours, 36 (11 by car, 3 by boat, 22 on foot); total party-miles, 137 (90 by car, 12 by boat, 35 on foot). **Total species, 55; total individuals, 7,744.** This is a good count of species for this area, but nothing really outstanding. Of some interest are the **Horned Larks** and **Vesper Sparrow**, each for second census in last 14 years.—Tom Bryan, Harold Click, Lin Hendren (compiler), Tom Hendren, E. M. Hodel, Fred Mastin, L. H. Petree, Bobby Pardue, Bill Roth, W. P. Smith, Donnie Storie, James Wicker.

Great Smoky Mountains National Park, Tenn.-N. C. (all points within a 15-mile diameter circle centered on Bull Head of Mt. LeConte, same area as in 1937-1956 and 1962 to date).—3 Jan.; 7 AM to 5 PM. Partly cloudy, overcast; temp. 18-40°; wind variable, 5-30 mph. Thirty-six observers in 10 parties. Total party-hours, 80 (5 by car, 75 on foot); total party-miles, 135

(83 by car, 52 on foot). **Total species, 57; total individuals, 3,380.** The absence of northern finches is in sharp contrast to the unusually large numbers of these birds a year ago.—Mrs. Thos. Arp, Ross Bender, Carson Brewer, Kit Brewer, Vivien Brown, James Campbell, Donald DeFoe (compiler), Ray Ellis, John Elson, Mary Enloe, Lloyd Foster, Mr. and Mrs. H. C. Garlinghouse, David Highbaugh, Joseph Howell, Susan Hoyle, Beth Lacy, Laura Lacy, Helen Lewis, Mrs. Max Miller, Mr. and Mrs. Robert Monroe, Julia Moore, Louise Nunnally, Ricky Nunnally, Holly Overton, Paul Pardue, Edward Smith, Arthur Stupka, Mr. and Mrs. T. C. Swindell, James Tanner, Mr. and Mrs. W. B. Williams, Mr. and Mrs. G. R. Wood.

Greensboro, N. C. (all points within a 15-mile diameter circle centered ½ mile SW of WBIG transmitter as in 1963; deciduous and pine woods 25%, thickets 20%, fresh-water lakes and ponds 30%, fields 10%, marsh and wooded swamps 10%, lawns and parks 5%).—2 Jan.; 5:30 AM to 5:30 PM. Variable cloudiness; temp. 36-68°; wind S to SW, 6-26 mph. Forty-two observers in 10 parties, 6 individuals working own yards. Total party-hours, 92 (46 by car, 46 on foot); total party-miles, 369 (321 by car, 48 on foot). **Total species, 74; total individuals, 9,712.** Vesper Sparrows were found by two different parties (MW, ES).—John Austin, Rose Avery, Helen Bedon, John Carr, Mrs. D. A. Cason Jr., Mrs. E. V. Cobb, Inez Coldwell, Mrs. F. H. Craft, Larry Crawford, Mr. and Mrs. G. W. Daniels, Charlotte Dawley, Mrs. R. D. Douglas, Brad Hawkins (compiler), Fred Hinton, Sidney Holmes, Bruce Kappel, Mrs. D. D. Kirk, Mrs. C. Knight, Robert Lasley, James Mattocks, Mrs. R. McCoy, Ethel McNairy, Ida Mitchell, Elizabeth Ogburn, Mrs. D. Parsons, Penny Parsons, Mr. and Mrs. George Perrett, Etta Schiffman, Mrs. W. D. Seawell, Dr. and Mrs. A. D. Shaftesbury, Ruth Sikes, George Smith, Mrs. W. F. Smyre, Thomas Street, Mrs. C. R. Suratt, Mrs. D. G. Tipton, Margaret Wall, Carl Ward, Mrs. R. H. Weisner.

Henderson, Vance Co., N. C. (all points within a 15-mile diameter circle centered in Henderson; meadow lands, woods, lake shore, farm land).—2 Jan.; 8 AM to 4:30 PM. Mild, cloudy; temp. 40-60°; wind 8-10 mph. Seven observers in 1 party, 4 individuals working own yards. Total party-hours, 8.5 (3 by car, 5.5 on foot); total party-miles, 45 (42 by car, 3 on foot). **Total species, 48; total individuals, 2,471.**—Neita Allen, A. W. Bachman, Jeanette Bachman, Mary Frances Chavasse, Mariel Gary (compiler), May Hunter, Garnette Myers.

Hilton Head Island, S. C. (all points within a 15-mile diameter circle centered Hilton Head Island Post Office; mixed woods 25%, fields and fresh ponds 25%, ocean and beach 20%, pine woods 5%, tidal rivers, creeks and mud flats 25%).—29 Dec.; 6:30 AM to 6:00 PM. Sunny and warm; temp. 46-63°; wind NE, 5 to 15 mph. Forty-three observers in 14 parties. Total party-hours, 109 (31 by car, 72 on foot); total party-miles, 340 (284 by car, 60 on foot). **Total species, 135; total individuals, 11,474.** Lesser Scaup and Short-billed Dowitchers were recorded. The **Cattle Egret** (CN, EOM) was observed at close range for about five minutes. The **White Ibis** (AE, AH, FH, SW) were immature birds seen flying toward a known heronry. **Prairie Warblers** (VD, CS) were seen at close range in good light.—Mr. and Mrs. W. H. Branch, Mrs. Sidney Brody, Nancy Butler, Dr. and Mrs. M. P. Charnock, L. B. Davenport Jr., Violet Duane, Anna Evans, Mr. and Mrs. W. C. Grandberry, Avery Hack, Mrs. Billie Hack, Frederick Hack, Orion Hack, Mr. and Mrs. David Harrall, Irma Hurff, Florence Harry, Alva Hines, Charlotte Inglesby, Arline Jones, Mr. and Mrs. John Jordan, Mr. and Mrs. Henry Lawrence, Imogene Lowden, Mr. and Mrs. E. O. Mellinger, Beatrice Milley, Carolina Newhall, Anne Reddy, Marie Reddy, Mr. and Mrs. Carroll Sergeant, Joyce Swanberg, Kathy Swanberg, Ivan R. Tomkins, Mr. and Mrs. Zack Van Landingham, Sally White, Gladys Wilde, Alice Woodring. (Mrs. David Harrall, compiler.)

Hyde County, N. C. [Formerly Mattamuskeet.] (all points within a 15-mile diameter circle centered at Mattamuskeet Lodge and including most of

Mattamuskeet Refuge and portions of Swanquarter Refuge; fields and thickets 20%, pine woods and swamps 25%, fresh-water lake 40%, fresh marsh 5%, brackish-water bays 5%, and brackish marsh 5%).—27 Dec.; 6:00 AM to 5:00 PM. Sky overcast; temp. 53-66°; wind SE to S, 5-10 mph. Eight observers in 3 parties. Total party-hours, 68 (72 by car, 4 by boat, 5 on foot); total party-miles, 160 (135 by car, 20 by boat, 5 on foot). **Total species, 75; total individuals, 128,226.** Lesser Scaup recorded.—Ethel S. Barkley, Willie G. Cahoon (compiler), Geraldine Cox, Mary McLaurin, Edward Marrow, Robert G. Prescott Jr., Thomas E. Sanderson, Hal G. Swindell.

Jackson County, N. C. (all points within a 15-mile diameter circle centered 2½ miles SE of Tuckaseigee on Highway 107, to include Cashiers, Tuckaseigee, Thorpe and Bear Lakes; farm land and pasture 18%, coniferous woodland 20%, deciduous woodland 50%, other 12%).—30 Dec.; 6 AM to 6 PM. Rain to partly overcast; temp. 30-60°; wind variable, 5-35 mph. Four observers in 1 party, 1 individual working own yard. Total party-hours, 12 (8 by car, 4 on foot); total party-miles, 127 (122 by car, 5 on foot). **Total species, 48; total individuals, 669.** The **Black-capped Chickadee** is a fairly common permanent resident in Jackson County at altitudes above 3,500 feet; the one bird recorded was identified by voice and altitude (RP). The **Oregon Junco** was observed by Richard H. Peake Jr. in a brushy margin on the edge of Thorpe Lake in the company of Slate-colored Juncos, Field Sparrows, Song Sparrows, Cardinals, and American Goldfinches. Although the sky was overcast, the bird was seen well for 10 minutes with 7x50 binoculars at a distance of about 30 feet. The blackish-gray head (crown, nape, forehead, chin, and throat) was set off very distinctly from the buffy brown of the back. The breast and belly of the bird were white although the sides and flanks had traces of buffy brown. The bill was pink. Peake had previously seen the species in California.—Philip Clark, Mrs. David Matthewes, Richard H. Peake Jr. (compiler), David Purser III, David Purser IV.

Lenoir, Caldwell Co., N. C. (all points within a 15-mile diameter circle centered at Lenoir in the Nature Sanctuary, Lower Creek Church area to include Powell Brick Yard, Patterson School, Bruner residence, Moose Club lake; fields 40%, mixed woods 40%, town 20%).—2 Jan.; 6 AM to 5:30 PM. Morning sunny, afternoon cloudy; temp. 31-48°; wind 4-10 mph. Eleven observers in 2 parties, 2 individuals working own yards. Total party-hours, 26 (22 by car, 4 on foot); total party-miles, 43 (34 by car, 8 on foot). **Total species, 43; total individuals, 1,999.** Five **Common Redpolls**, a species not previously recorded in this area, were seen 23 December by Mrs. Mason Hollifield, a competent observer.—Mrs. J. B. Bernard, Mrs. Murray Bruner, Margaret Harper (compiler), Cary Harrison, Mrs. Mason Hollifield, Fred May, Helen Myers, Thomas Parks, Mrs. James H. Segars, Wendell P. Smith, Robert Styres.

Morehead City, N. C. (all points within a 15-mile diameter circle centered at Crab Point intersection; sounds and tidal rivers 60%, mixed and pine woods 25%, farm land 12.5%, ocean front 2.5%).—25 Dec.; 7 AM to 5 PM. Warm, partly cloudy; temp. 60-68°; wind SW, 10-12 mph. Four observers in 3 parties. Total party-hours, 27 (9 by car, 18 on foot); total party-miles, 82 (70 by car, 12 on foot). **Total species, 92; total individuals, 4,769.**—David Barnes, John O. Fussell II, John O. Fussell III (compiler), Tommy Wade.

New Bern, N. C. (all points within a 15-mile diameter circle centered at New Bern Airport, to include Neuse River from mouth of Broad Creek to Streets Ferry, Trent River to Hardison farm, farms east of airport; fields and marshes 40%, mixed woods 30%, open waters 15%, residential 15%).—3 Jan.; 6:30 AM to 5:30 PM. Clear; temp. 31-45°; wind NbNW, 5-25 mph. Eight observers in 3 parties, 2 individuals working own yards. Total party-hours, 24 (14 by car, 10 on foot); total party-miles, 110 (98 by car, 12 on foot). **Total species, 69; total individuals, 4,522.** Lesser Scaup recorded.—Fred Conderman, Margaret Conderman (compiler), Allen Connelly, Eleanor Heath, Margie Moore, Allen Olmstead, Tom Sherratt, Sam Sweeney.

North Wilkesboro, N. C. (all points within a 15-mile diameter circle including portions of Reddies and Yadkin River valleys; 45% woods, 40% open fields, 15% town streets).—23 Dec.; 7:00 AM to 4:15 PM. Cloudy and fog; temp 40-46°; wind E, 1-5 mph. Two observers in 1 party. Total party-hours, 9.25; total party-miles, 14 (6 by car, 8 on foot). **Total species, 44; total individuals, 907.**—Wendell P. Smith (compiler), Donald Story Jr.

Raleigh, N. C. (all points within a 15-mile diameter circle centered at Capitol Building, practically same area as previous counts; lake and small ponds 25%, mixed pine and deciduous woodland 40%, deciduous woodland 15%, open fields 15%, suburbs 5%).—30 Dec.; 7 AM to 5:30 PM. Clear most of day, partly cloudy in late afternoon; temp. 35-60°; wind 3-5 mph, SW most of day, ground bare, water open. Fifty-three observers in 15 parties. Total party hours, 67.5 (27.5 by car, 40 on foot); total party-miles, 282 (243 by car, 39 on foot). **Total species, 78; total individuals, 17,885.** Lesser Scaup recorded.—G. G. Barber, Dick Barber, Bill Britt, Mike Brown, Mr. and Mrs. Chas. Bryan, Mr. and Mrs. J. W. Chalfant, J. M. Chambers, Mrs. Olga Charlton, Mrs. W. R. Clary, Mrs. Ralph Clements, Mrs. J. B. Cotner, Mrs. Gladys Currin, Harry T. Davis, Philip H. Davis, Mrs. L. C. Dilliard, Nick Elliott, Rev. M. Flatter, Mrs. D. H. Fuller, Deborah Fuller, Charlotte H. Green, J. F. Greene, Mrs. Ellen Glenn, W. L. Hamnett, Mrs. Samuel Hoshour, Mabel Jones, Jean Kane, Mr. and Mrs. John L. Lamson, Dr. and Mrs. W. D. Lee, Mrs. N. D. McIntyre, Daryl Moffett, Jack Norman, R. J. Pearse, Eloise F. Potter, Brian Potter, David Potter, Mrs. John Rhodes, Mrs. Merle Showalter, Mr. and Mrs. Ben Smith, Mrs. Leslie Smith, Chris Underhill, David Waters, Mr. and Mrs. Geo. Watson, Mrs. W. L. Wilson, Mrs. D. L. Wray, D. L. Wray (compiler), Dr. and Mrs. L. Wyman.

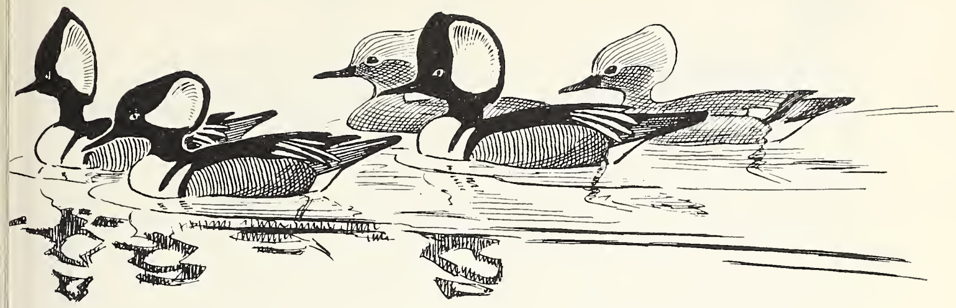
Southern Pines, N. C. (all points within a 15-mile diameter circle centered at Southern Pines; lakes and ponds 20%, fields and airport 30%, town feeders 10%, swamps 15%, woodlands 25%).—30 Dec.; 7:00 AM to 5:10 PM. Foggy, then clear; temp, 35-65°; wind SW, 7 mph. Two observers in 1 party, 5 individuals working own yards. Total party-hours, 7 (7 by car); total party-miles, 88 (88 by car). **Total species, 54; total individuals, 1,278.** Lesser Scaup recorded.—Jay Carter (compiler), Mrs. Avery W. Evans, Louise Haynes, Mrs. Lloyd Prime, Mary Keller Wintyen, Leslie Wotton, Mrs. Leslie Wotton.

Tryon, Polk Co., N. C. (all points within a 15-mile diameter circle centered at Tryon Railway Depot; area approximately half Piedmont and half Mountain with elevations ranging from 900 to 3100 feet; open pastures and farmlands 45%, woodlands 45%, brooks and streams 5%, residential 5%).—28 Dec.; 7:30 AM to 5:30 PM. Clear; temp. 38-55°; wind mostly calm. Twenty-two observers in 6 parties, 11 individuals working own yards. Total party-hours 40.5 (40.5 by car, 31.5 on foot); total party-miles, 105 (80 by car, 25 on foot). **Total species, 48; total individuals, 1,488.** The **Red-cockaded Woodpecker** arrived at a suet feeder about 15 December and has remained in the vicinity through 3 January. The bird is apparently a female since no red feathers can be detected even at close range. The 10 **Common Snipe** are a first known record for this area. Conspicuous by their absence are the Pine Siskins. Blue Jays, Robins, Cardinals, Purple Finches, Rufous-sided Towhees, Chipping Sparrows, and White-throated Sparrows are present in considerably reduced numbers compared to recent years. This is the first Christmas Count made by members of the Tryon Bird and Nature Club, but it clearly indicates a need for keeping more detailed records of bird population changes in the area.—William Abbott, Faith Bell, Ralph Bunch, Parker Comfort, Charles Downer, George Draper, Helen Edney, Marguerite Francis, Betty Frost, Norme Frost (compiler), Margarie Haselwanter, Nellie Johnson, Frank MacGregor, Becky Moore, Dorothy Nann, Carla Nesslinger, Fred Smith, A. F. Squire, Ruth Tucker, David West, Dorothy West, William West.

Wayne County, N. C. (all points within a 15-mile diameter circle centered at Indian Springs to include Seven Springs, Mt. Olive, Cliffs of Neuse State Park, Walnut Creek Lake; fields and roadsides, 40%, lakes and ponds 20%, pasture 5%, mixed woodlands 20%, feeders 7%, marshes 8%). —30 Dec.; 6 AM to 5 PM. Fog til 9 AM, clear afterwards; temp. 36-50°; wind 5 to 15 mph. Three observers in 1 party, 2 individuals working own yards. Total party-hours 10 (8 by car, 2 on foot); total party-miles, 115 (110 by car, 5 on foot). **Total species, 62; total individuals, 1409.** An effort was made to get a good count of **Baltimore Orioles** in Mt. Olive. I reduced the total by 10% to allow for birds which may have visited more than one feeder. The final total of 70 is almost as many as the total for the complete count of last year. These ladies have banded almost 100 orioles this winter; so the high count is not out of line. The **Yellow-breasted Chat** (MW) has been a regular visitor in Mt. Olive feeders this winter. The 20 **Palm Warblers** were found in a dairy pasture, feeding on the ground under some sweetgum trees. The ground was covered with corn cobs, shucks, and manure.—Margaret Davis, Elizabeth Holmes, R. H. Siler (compiler), Jean Siler, Margaret Walker.

Wilmington, N. C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction, including Wrightsville Beach, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, Masonboro Sound, Greenfield Lake, Echo Dairy Farm; mixed pine and deciduous woodland 40%, beach and salt marsh 35%, fresh water ponds and river 20%, pasture 5%).—2 Jan.; 5:30 AM to 6:00 PM. Clear, windy in afternoon; temp. 45-70°; wind 9-24 mph. Twenty-four observers in 7 parties. Total party-hours, 75.5 (30.5 by car, 9 by boat, 37 on foot); total party-miles, 320 (239 by car, 41 by boat, 40 on foot). **Total species, 140; total individuals, 15,872. Cattle Egret** seen at Echo Dairy Farm by BE, LJ, JH. **Fulvous Tree Duck**, Orton Plantation (MB, JFP, FJ). Male **Harlequin Duck**, present since 17 December when found by Parnell among Bufflehead close off shore at Carolina Beach; seen on count day by RH, JE, FN, JFP, and many others; second record for this area (*Chat*, 26:8,18). **Least Tern** and **Gull-billed Tern**, inland water way near Carolina Beach (JD, DS, LS, TS); **Common Tern**, Wrightsville causeway and beach (EP, JP, TRP, DE); **Orange-crowned Warbler**, Wrightsville Causeway (JP); **Yellow-throated Warbler**, Wilmington (PM, TQ, EWW). Male **Dickcissel** regular visitor at Birdie Menzer's feeder in Wilmington since 30 December; seen on count day by BM, PM, TQ, EWW.—Katharine Alexander, Maurice Barnhill, Judson Dukes, Dot Earle (compiler), John Erickson, Betty Everson, R. J. Hader, James Hunt, Fred Johns, Lee Jones, Billy McEachern, Polly Mebane, Birdie Menzer, Frances Needham, James F. Parnell, Eloise Potter, Jack Potter, T. R. Potter, Tom Quay, Doris Simpson, Lucia Simpson, Tom Simpson, Mary Urich, Mrs. E. W. Winkler.

Winston-Salem, N. C.—A good count was made at Winston-Salem 26 December from 6 AM to 6 PM. In spite of the constant rain, 11 observers spent 28 party-hours in the field and covered 148 party-miles. A total of 58 species was recorded; 6,299 individuals. Unfortunately the list was received too late to be published in full, but the following species are worthy of note: 1 **Green-winged Teal**, 2 **Redhead**, 15 Horned Lark, 1 Red-breasted Nuthatch, 35 Rusty Blackbirds, 1 **Chipping Sparrow** (Tanglewood Park, GG).—Gardner Gidley, Margaret Gidley, Royce Hough Sr., Royce Hough Jr., Doris Simpson, Lucia Simpson, Thomas Simpson (compiler), James Stephenson, Tarasa Stephenson, Myron Vourax, Robert Witherington.



GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Fulvous Tree Ducks Taken in Currituck Sound, North Carolina.—While duck hunting in Currituck Sound along the marshes of the Outer Banks between Carola and Duck, North Carolina on 11 December 1964, my companion, Gardner Gidley, shot into a group of 18 Fulvous Tree Ducks (*Dendrocygna bicolor*) and killed three of them. They are to be mounted. One will be added to the collection of the Currituck Shooting Club; one will go to the Winston-Salem Nature-Science Museum; and possibly the third will be sent to the State Museum at Raleigh.

Incidentally, it was most interesting seeing the tree ducks land, Mr. Gidley tells me. They have long, scrawny, thin necks and they lower their heads down below their feet when landing as though scrutinizing the water below them. They land very slowly and awkwardly and are easy prey for the gunner. The flesh is reputedly delicious, but since we were having these mounted, I cannot attest to this.

Until recent years the Fulvous Tree Duck was a very rare bird on the Atlantic coast. Since 1960, however, they have been found in fair numbers scattered along the coast of both Carolinas. *The Chat* records numerous North Carolina occurrences in the fall of 1960 and again in the following winter.—R. PHILIP HANES JR., *Box 202, Winston-Salem, North Carolina, 30 December 1964.*

Blue-winged Teal Breeding in South Carolina.—On 24 June 1964, Hoyt Mills, Romain Refuge representative stationed on Bull's Island, Charleston County, South Carolina, found two young Blue-winged Teal just beginning to fly. Subsequent observations by Mr. Mills and his son Holland, established the presence of six pairs of adults and a total count of 26 young on the Island. This information came to me from E. Frank Johnson, Manager of the U. S. Fish and Wildlife Refuge at McClellanville, South Carolina. Since I knew of no breeding records for this species in South Carolina, more details were requested.

Mr. Johnson, who assumed his present duties in the fall of 1963, reported search of his office records revealed instances of Blue-wings breeding in small numbers each year since 1960. In that year a nest of eggs found on Cape Island (ca. 15 miles ENE of Bull's Island) was later destroyed by raccoons. A few young were noted in 1961 and 1962, and in 1963 one brood of two young hatched on Bull's Island.

There are breeding records for this species in Louisiana (Lowery, *Louisiana Birds*, 1955); Florida (Howell, *Florida Bird Life*, 1932); and North Carolina (*Birds of North Carolina*, 1942). In North Carolina, Walker found young in July 1938 on Pea Island, and reported five or six pairs breeding there in 1940. Forbush (*Birds of Massachusetts*, etc., 1928) says Blue-wings "reported as breeding in . . . South Carolina . . .," but I do not know the evidence on which this statement is based.

Yet to be established is the subspecific identity of the Blue-winged Teal breeding on this coast "to determine whether or not they are the race *A. d. orphna* described from the Eastern Shore of Maryland." (Wetmore, personal letter).

I thank E. Frank Johnson for his full cooperation and permission to submit this note.—E. BURNHAM CHAMBERLAIN, *P. O. Box 3039 St. Andrew's Branch, Charleston, South Carolina, 14 January 1965.*

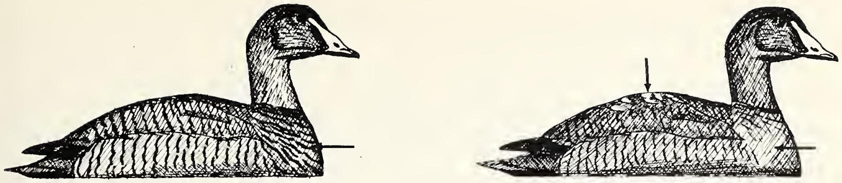
Another Harlequin Duck in North Carolina. On 17 December 1964, a male Harlequin Duck (*Histrionicus histrionicus*) was observed in the surf off the north end of Carolina Beach, North Carolina. It was associated with a flock of 20 to 30 Buffleheads resting just beyond the breakers. The bird was subsequently seen on 20, 25, 26, and 28 December 1964 and on 2 January 1965, when it was seen by most of the people participating in the Wilmington Christmas Count. During these observations the bird was always found within 300 to 400 yards of the fishing pier on the north end of the beach. It was usually with or near one of the several small groups of Buffleheads that regularly used this area. The Harlequin Duck appeared to associate freely with the Buffleheads, and no antagonism was noted. The weather throughout the period of observations, and for some time prior, was unusually mild. Efforts to collect the bird have not been successful.

There are two previous records of the Harlequin Duck in North Carolina. On 30 December 1961, Greg Massey and Maurice Barnhill observed a male at Carolina Beach (*The Chat*, 26:18-19, 1962). It was found in almost the exact same place as the current bird (personal communication with M. Barnhill). The second record was by R. P. Holmes and occurred at Ft. Macon, North Carolina on 4 January 1964 (*The Chat*, 28:29, 1964).

Three records do not allow more than speculation; but three records since 1961, with none prior to that time, may indicate an increase in the incidence of far-southward movement of this species. The fact that all three records were made in late December and early January is also interesting.—JAMES F. PARNELL, *Biology Department, Wilmington College, Wilmington, North Carolina, 9 January 1965.*

Common Eider at Morehead City, North Carolina.—The brief notes that follow are taken from personal letters to the Department Editor. Possibly both refer to the same bird. The sites appear to be the same.

On 22 November 1964 I briefly visited the shore near Ft. Macon (near Morehead City, N. C.). About 20 yards offshore I saw a female eider that I am fully satisfied was *S. mollissima*—the Common Eider—with which I am very familiar, having seen both wild and captive individuals and flocks



Shown at left is a typical female Common Eider. At right is the bird seen at Fort Macon, Carteret County, N. C., 23 January 1965, as drawn from memory by Lee Jones. Note the absence of barring on the breast of the bird at the right and the small number of white feathers on the back, both of which indicate that the bird is an immature male.

in England. (It may well have been oiled.)—JEREMY J. HATCH, *Department of Zoology, Duke University, Durham, North Carolina, 8 January 1965.*

Yesterday, 19 December (1964), at Ft. Macon, I found a female eider. Judging from the profile of its head, I believe it was a Common Eider, but I cannot be positive. It was like the Common Eider I saw at Wrightsville Beach on 29 December 1960 (*Chat*, 25:33, 1961) but the latter individual was observed swimming under a bridge, directly beneath me, permitting an unbelievably good look at its bill and head. The Fort Macon bird was about 100 yards off the end of a rock jetty. There were nearby a group of Common Scoters, Ruddy Ducks, and a single Old Squaw—all together. The eider remained separate from them.—ROBERT P. HOLMES III, *306 Country Club Drive, New Bern, North Carolina, 20 December 1964.* [A Common Eider, apparently the same bird, was seen by nearly everyone attending the CBC meeting at Morehead City 23 January 1965. Lee Jones, who is familiar with the species, expressed the opinion that the individual is a young male. He noted the general darkness of the plumage and the absence of regular barring on the breast and back. When Jones viewed the bird in good light through a Questar, he found a few white feathers on the back, as shown in the illustration above—*Ed.*]

Common Eiders at Nags Head, North Carolina.—In November 1964, I birded the Outer Banks of North Carolina with a small group from the Washington, D. C., area. On 9 November Helen Goldstick, one of our party, watched the birds over the ocean from our headquarters motel at Nags Head while the others explored the shore of the Sound.

Miss Goldstick saw Gannets, loons, scoters and gulls, and, at about 11 AM she spotted three large ducks flying south about 100 yards from shore. As they passed by she had a clear view and identified two of them as adult male Common Eiders (*Somateria mollissima*), a species with which she is familiar. The other bird was also an eider but in brown plumage and she did not make a firm identification, though she noted that it appeared closely similar in size and silhouette to the others. The males were in full adult plumage and she immediately checked the plumage pattern against the Peterson guide.

Since there are few recorded sightings of Common Eiders in North Carolina, an earlier additional observation is of interest. At sunrise on 21 February *1963*, Mr. and Mrs. N. M. Baker of Washington, D. C., and I observed two Common Eiders swimming within 20 feet of the shoreline at a point less than a mile south of where Miss Goldstick made her observations. Those two birds appeared to be resting and allowed prolonged views at less than 100 feet with 15X and 30X Balscope lens. We also used the 60X lens to check the bill processes. We determined that one was an adult female and the other an immature bird.—CARL W. CARLSON, *5706 Lone Oak Drive, Bethesda, Maryland, 10 December 1964.*

Sandhill Cranes Seen Near the South Edisto River, South Carolina.—This past December (29th, 1964) while duck shooting at "Ti-Ti," the property of Donald D. Dodge, I again heard first hand reports of the sighting of Sandhill Cranes in this area. Five birds had been seen during Christmas week and they were well described to me by Billy Baldwin, overseer of this duck hunting property. He mentioned their tall appearance, gray plumage, red patch on top of head, extreme shyness, and their rolling calls when alarmed. Also mentioned was the characteristic rapid upward beat of their wings while in flight. Mr. Baldwin has seen cranes here during mid-winter for the past five years. As an outdoors man he is familiar with the Great Blue Heron, the Wood Ibis and the White Ibis so often seen in duck marshes.

"Ti-Ti" is part, if not the whole, of an island located between the Ashepoo and South Edisto Rivers. The rich, boggy, peat-like soil is the natural environment of an introduced plant called "Red-root" (*Gyrotheca tinctoria*). In Florida the plant is called "Pink-root" and its fleshy roots are a favorite food of the local Florida (Sandhill) Crane. Here in South Carolina it was introduced because of its great popularity with wild duck. This food plant plus the local peat soil areas and shallow water covering (2 to 6 inches) must be the natural attraction that has caused a small group of Sandhill Cranes to leave their nearest habitat, central Florida and south Georgia, and make Low Country South Carolina a recent northern extension of their range.—JOHN HENRY DICK, *Dixie Plantation, Meggett, South Carolina, 15 January 1965.*

Rare Birds on North Carolina's Outer Banks.—In a party of four, I spent five days in November (7-11) 1964 on the Outer Banks of North Carolina, birding from Duck to Ocracoke. We headquartered at Nags Head and gave major attention to the stretch between Whalebone Junction and Pea Island Refuge.

Our total count for the period was 127 species firmly identified. We found swans, geese, and dabbling ducks in good numbers, but the diving ducks apparently had not arrived. Red-throated Loons were abundant, but we saw only a few Common Loons and one Horned Grebe.

The most unusual species were, Common Eider, Hudsonian Godwit, Parasitic Jaeger, Western Kingbird, Lark Sparrow, Tree Sparrow, Lapland Longspur, and Snow Bunting. Of these, the eider and longspur observations are recorded elsewhere in this issue. Some comments upon the other species named seem desirable.

HUDSONIAN GODWIT. Ten on a mud flat near Bodie Island Light, 8 November. Watched from two sides of the flat. Tail pattern, bill, and black wing-linings carefully checked. Seen again on 9 and 10 November. (Species apparently increasing in numbers. The *Atlantic Naturalist* [19:242, 1964] records a flock of 32 in Bombay Hook Refuge, Delaware.)

PARASITIC JAEGER. One seen close to shore in good light by observers familiar with the species.

WESTERN KINGBIRD. One at the Ocracoke village dump, 10 November. Perched on the top of a myrtle bush, showing white outer tail feathers, large bill and other field marks clearly. Fed on the flies abundant over the garbage piles.

LARK SPARROW. One immature near intersection of State Route 12 and road to Manteo, 11 November. Face, breast-spot, and tail pattern seen repeatedly.

TREE SPARROW. One at Wright Brothers Monument grounds, 9 November. Cap and breast-spot seen well at close range by Jill Kennedy who is thoroughly familiar with the species, common in the winter near her home.

Snow Bunting. On 10 November, as we drove across the sand flats just north of Ocracoke, five flew up beside the car, crossed in front of us and alighted within 50 feet, where we could observe them from the car. They were in winter plumage.

Other members of our party were: Helen Goldstick and Jill Kennedy, both of Arlington, Virginia, and Robert L. Pyle of Washington, D. C.—Carl W. Carlson, *5706 Lone Oak Drive, Bethesda, Maryland, 10 December 1964.* [A few of the other observations of this party are included in our "Briefs for the Files."—*Dept. Ed.*]

Brown Thrasher Behavior.—Today, as we sat down for lunch on our porch, we noticed two Brown Thrashers in the open woods nearby, about 2 feet apart, wing fanning at each other, sometimes half way and at times with full elevation, walking first to one side and then the other, occasionally running at each other and crouching.

A most interesting observation was that the two birds had a definite avian audience. Two immature Rufous-sided Towhees and three immature House Sparrows were on the ground nearby, closely observing the thrashers' actions, backing away as the thrashers moved closer to them, and then closer to the acting birds as they moved away.

A third thrasher appeared, and after watching a few moments, rushed at one of the pair of thrashers with wings held high. Both dropped low to the ground in an attack position and the third thrasher then flew away. The first two thrashers again began their antics, moving near three low, wild azalea bushes.

We then realized that a number of birds were in the azaleas and were intently observing the thrashers. A count revealed four House Sparrows, three towhees and seven Cardinals, all following the action below. As the thrashers moved under one of the azaleas, one of them flew up about 12 inches into the azalea and the other continued to fan its wings below. The audience remained in the azalea. The thrasher on the ground flew up into the bush about 12 inches from the other bird. After about a minute one of the thrashers flew 10 feet away and began feeding. The other birds then gradually moved away. I noticed my watch as we sat down to lunch and the episode had lasted 19 minutes. Most of it was observed with binoculars even though the birds were only 30 to 35 feet away. It occurred between 1:30 PM and 2:00 PM, and the temperature was 78°F. The birds observing the thrashers were all immature, and at no time did any of the group emit a sound. At one time a pair of Bobwhite walked past the performing birds, within 3 or 4 feet, and did not appear to notice them.—John O. Watkins, *359 Pine Street, Spartanburg, S. C., 7 September 1964.*

Evening Grosbeak Recoveries.—Ten Evening Grosbeaks (*Hesperiphona vespertina)* were banded at Zebulon, North Carolina, 17 April 1964, and two of these birds were recovered within four months of banding. The bird having band number 66-180642 was retrapped by A. H. Fast at Arlington, Virginia, 25 April, only eight days after banding (Fast, *Raven*, 35:58). In all probability the bird actually covered the 250 air miles between Zebulon and Arlington in less than eight days. Another grosbeak trapped and banded at the same time as the bird retrapped by Fast repeated at my station on 19 April. There were 14 repeats in all between 17 and 24 April. Grosbeaks banded as early as 20 February and as late as 23 April repeated at my station on 24 April. After this date only four more grosbeaks were banded for the season, and there was only one repeat. It is my belief that the Evening Grosbeak flock which wintered in the Zebulon area departed the night of 24 April.

Apparently this particular flock of grosbeaks nests in that portion of Canada lying south of the St. Lawrence River and north of Maine. An adult male Evening Grosbeak banded on the West Branch of the Patapedia River in the Province of Quebec 24 June 1962 was recovered at Zebulon 2 March 1964; one banded at Hoyt, Sunbury County, New Brunswick, 21

May 1962, was retrapped at Zebulon 17 March 1964; and a male banded at Zebulon 17 April 1964 (#66-180643) was recovered near Butternut Ridge, New Brunswick, 1 August 1964. Certainly the record of the two male Evening Grosbeaks trapped simultaneously, banded consecutively, and recovered less than four months after banding indicates a relationship between Zebulon, Arlington, and New Brunswick in the movement of one flock of grosbeaks during the spring and summer of 1964.—ELOISE F. POTTER, *Box 487, Zebulon, North Carolina, 29 December 1964.*

A Second South Carolina Sight Record of the Pine Grosbeak.—The 1964 Christmas Count at Charleston, South Carolina, taken on 2 January 1965, includes the observation of two Pine Grosbeaks *(Pinicola enucleator).* Since this bird is not on the state list and since there has been but one previous sight record, details of the present observation are desirable.

At about 10 o'clock on the morning of the count, my party of six observers was carefully working along an old wagon road in a heavily-wooded swamp area near the upper reaches of the Wando River. The weather was clear and mild (ca. 68°). A flock of American Goldfinches could be heard in the tops of the surrounding pines and oaks. Two birds in the top of a bare oak caught my attention. They were about 125 feet away, feeding on the oak buds in the usual finch manner. For about 20 minutes we had these birds under almost constant observation by one or more of the party. The lighting was excellent although the viewing angle was not good. We were equipped with binoculars and a 20-30X scope.

Obviously the birds were large finches. They appeared to have longer tails in proportion to body length than Evening Grosbeaks have. The bills were black and not crossed and typical of the grosbeaks but smaller than the bill of the Evening Grosbeak. Two wingbars were plainly visible. The underparts were grayish, without streaks. The head and back were a dull yellow and, on one of them, the rump had a rosy tint when viewed through the scope. The tails showed a definite V. They appeared less chunky in body than the Evening Grosbeaks do.

No call notes were heard. One of them repeatedly flew to an adjacent maple or another oak to feed but soon returned. The other remained where we found it until both left. In flight, there was a decided undulating movement typical of the goldfinches.

After a discussion of other possibilities, all members of our party were in agreement on the spot that these were female or immature male Pine Grosbeaks, in spite of the fact that they were not only far out of range but also far removed from normal habitat. Also, we were well aware of the fact that this is not a "finch winter" in the Southeast.

I am convinced that our identification is correct. On 12 March 1962, I had an adult pair of Pine Grosbeaks under close observation at my home at Magnolia Gardens. They were identified by my wife and son before I saw them. Another member of our party on the count, Mrs. Loyd S. Smith, until recently a resident of Connecticut, is familiar with this species from observations in the New England states.

While we were not able to collect one of these birds, our observation does strengthen the position of the Pine Grosbeak on the state Hypothetical List. —THEODORE A. BECKETT III, *Magnolia Gardens, Johns Island, South Carolina, 12 January 1965.*

Sharp-tailed Sparrow Taken Near Morehead City in October.—On 24 October 1964, while I was collecting in the Crab Point area near Morehead City, North Carolina, one of the birds taken was a Sharp-tailed Sparrow. Subspecific identification shows it to be referrable to the race *Ammospiza caudacuta nelsoni.* It was taken in conjunction with three immature Swamp Sparrows *(Melospiza georgiana)* and my field notes for that date indicate that it was the only one of that species seen.

According to *Birds of North Carolina,* 1959, Nelson's Sharp-tailed Sparrow is "a rare bird in North Carolina." The most recent record listed being that of Wetmore in 1939. The present specimen is now No. 88 in the collection of Atlantic Christian College. It is a male, measuring: bill 10.5; wing 54; tail 52; and tarsus 19 mm.

In separating it from the other four races of Sharp-tailed Sparrows recognized in the 1957 A.O.U. Check-List, I have relied upon the descriptions given in Peterson's Field Guide, Chapman's *Handbook of Birds*, Roberts' *Birds of Minnesota*, and Ridgway's *Birds of North and Middle America*. In all cases the plumage of this specimen agreed with the descriptions, particularly with the rather complete description in Roberts.

In addition to this, with the kind permission of W. L. Hamnett, I have examined the skins in the collection of the State Museum at Raleigh to confirm my identification.—GEORGE T. TAYLOR, *Science Department, Atlantic Christian College, Wilson, North Carolina, 12 December 1964.* [The Wetmore record cited in *Birds of North Carolina* concerns specimens taken near Southport, 10 and 17 May 1939. It was taken from *Notes on the Birds of North Carolina*, published in 1941 as bulletin No. 3117 of the *Proceedings of the United States National Museum.* A further reading of that text, p. 527, discloses that "In fall, one was shot 6 miles northeast of Beaufort on November 14 (1939), an indication that Nelson's Sparrow may possibly winter in the coastal area."—*Dept. Ed.*]

Lapland Longspur on the North Carolina Outer Banks.—In the December 1964 issue of *The Chat*, a field note from this observer reported an unusual variety of shore birds found during Labor Day week on the grassy areas of the Wright Brothers Monument at Kitty Hawk, North Carolina. At that time it occurred to me that these broad, grassy areas would be likely to attract ground birds in winter.

On 9 November, I revisited the Monument with two other birders. We spread out and walked the "runway" area from the base of the hill north, and soon flushed a flock of meadowlarks and with them, two smaller birds. We noted where they landed and stalked toward the spot. Soon we found one and then the other creeping like mice between the grass clumps. They allowed us to move to within 6 feet or less—so close that we could not focus our binoculars.

The birds would crouch, then move rapidly for a foot or two, and crouch again. If we looked away, it was impossible to locate them until they moved again. We had ample opportunity to check the birds closely with both the Peterson and Pough guides and found that they were Lapland Longspurs (*Calcarius lapponicus*) in winter plumage.

On 11 November we returned to the Monument with a fourth member of our group and again found the same two birds, presumably, in the same place. We used the previous stalking method and again were able to come within a few feet of them.—CARL W. CARLSON, *5760 Lone Oak Drive, Bethesda, Maryland, 10 December 1964.* [There are but few known records of the Lapland Longspur in North Carolina. The Brimleys found it first at Raleigh in 1893 and collected 4 specimens there in 1895; Burleigh considered it "probably of casual occurrence" in Buncombe County and cited three records there late in 1930 and 1932 (*Birds of North Carolina*, 1959). *The Chat* (3:1-20, 1939) published an annotated list of the *Birds of Cape Hatteras* by Edwin L. Green, Park Biologist, containing the notation: "December 17, 1937, to January 26, 1938, a number of these were observed with the flocks of Horned Larks."

Also, *The Chat* (**10**:57, 1946) contains this contribution by Grace Anderson: "J. C. Crawford reports seeing six Lapland Longspurs on his farm (near Statesville, Iredell County) one day this winter after a snow. The birds were digging under the snow for seeds."—*Dept. Ed.*]

BRIEFS FOR THE FILES

Audubon Shearwater, 1 found alive with broken wing on beach near Morehead City, N. C., 24 July. Showed no sign of fright, died the next day, John Fussell III. • **Anhinga,** 1 low over creek, Wadmalaw Island, S. C., 1 November, N. A. Chamberlain. • **Green Heron,** 1, Bodie Island, N. C., 15 November, Paul W. Sykes Jr. • **Cattle Egret,** 1, Pea Island, N. C., 31 October, Paul W. Sykes Jr. • **Whistling Swan,** 2, just outside the Columbia, S. C., Christmas Count area, 3 January—still present, 8 January 1965, Gilbert Bristow, compiler. • **American Brant,** 2 in marsh at Carolina Beach, 20 December, Ronnie Underwood. • **Snow Goose,** 10,000 estimated, Pea Island, N. C., 14 November, Paul W. Sykes Jr. • **Blue Goose,** 16, Pea Island, N. C., 14 November, Paul W. Sykes Jr. • **Fulvous Tree Duck,** 19, Cape Hatteras, 15 November, Park Naturalist Clay Gifford; 9, Orton Pond near Wilmington, N. C., 2 January 1965, J. F. Parnell, F. Johns, and M. Barnhill. • **Ruddy Duck,** 1 in non-breeding plumage apparently spent the summer on Lake Johnson, Raleigh, N. C., R. J. Hader.

Sharp-shinned Hawk, 17, a good flight, Bodie-Pea Island area, 10 October, H. Lee Jones, Paul W. Sykes Jr. • **Bald Eagle,** 1 or 2, Hilton Head Island, S. C., 29 July-27 September; one watched as it robbed an Osprey of its prey over the golf course, Mrs. Caroline Newhall. • **Peregrine Falcon,** 1, perched, near Rocky Mount, N. C., 30 October, Joan Sykes and Paul W. Sykes Jr. • **Pigeon Hawk,** 1, Ft. Fisher, 10 September, Greg Massey; 1 at Wrightsville Causeway, N. C., 25 September, Mrs. Dorothy Earle.

King Rail, 1 at close range, 8 and 9 November near Whalebone, N. C., Carl W. Carlson and party. • **Virginia Rail,** 1 found dead, apparently hit by car, Nags Head, N. C., 9 November, Carl W. Carlson and party. • **Upland Plover,** 2, Pea Island, N. C., 2 September; 2, Bodie Island, 9 September, Paul W. Sykes Jr. • **Spotted Sandpiper,** 1, Wrightsville, N. C., 31 May (late), Mrs. Dorothy Earle. • **White-rumped Sandpiper,** 2 in marsh, Pea-Island, 8 November, Carl W. Carlson and party. • **Stilt Sandpiper,** 1, Pea Island, 8 November, Carl W. Carlson. • **Hudsonian Godwit,** 1 near Buxton, N. C., 17 and 19 September, Clay Gifford. • **American Avocet,** 81 counted, Pea Island, 31 October, Paul W. Sykes; 2 at Long Beach, N. C., 24-30 October, W. E. McConnaughey. • **Black-necked Stilt,** 2, Pea Island, 8 November, Carl W. Carlson. • **Northern Phalarope,** 1 feeding at close range, Bodie Island, 27 September, Paul W. Sykes Jr.

Common Tern, 50 counted resting on an island and 1 found dead at Hartwell Lake, Anderson, S. C., 19 September; 18 on 25 September; 1 on 26 November, Adair Tedards. • **Ground Dove,** 2 in yard at Kure Beach, N. C., 25 December, Ronnie Underwood. • **Yellow-billed Cuckoo,** 1 at Pea Island, N. C., 14 November—late—Paul W. Sykes Jr. • **Black-billed Cuckoo,** 6 in Bodie-Pea Island area, 27 August, Paul W. Sykes. • **Short-eared Owl,** 1, Bodie Island, N. C., 8 November, Carl W. Carlson; 1 mature male shot near Anderson, S. C., 26 November, Adair Tedards. • **Red-headed Woodpecker,** 1 adult, 1 immature, 8 September; 1 immature, 9, 11 September, Bodie Island, N. C., H. Lee Jones, Paul W. Sykes Jr. • **Yellow-bellied Sapsucker,** 1, Pea Island, N. C., 26 September; 1, Bodie Island, N. C., 11 October, H. Lee Jones, Paul W. Sykes Jr.; 1 male, Zebulon, N. C., 7 October, Eloise F. Potter; 1, Raleigh, N. C., 10 October, R. J. Hader.

Red-breasted Nuthatch, 1, Charleston Co., S. C., 21 October, Mrs. Loyd S. Smith; 2, Wilmington, N. C., 17 October, Mrs. Birdie Menzer. • **Blue-winged Warbler,** 1 or more, Raleigh, N. C., 10 and 24 September, R. J. Hader. • **Tennessee Warbler,** 1, Bodie Island, N. C., 27 August and 1 on 11 October, Paul W. Sykes Jr.; a very heavy migration through the Anderson, S. C., area, mid-September through 24 October, flocks up to 75 individuals, Adair Tedards. • **Magnolia Warbler,** 1 at Hilton Head Island, S. C., 3 October. Mrs. Caroline Newhall. • **Cape May Warbler,** 1 or more, Raleigh,

(Continued on Page 36)

BOOK REVIEWS

Studies in the Life of the Song Sparrow, Vol. I and II. Margaret Morse Nice. Reprinted by Dover Publications, Inc., 180 Varick Street, New York 14, N. Y., 1964. Each volume has chapter summaries, bibliography, index of subjects, index of species. Total of xxii + 574 p. Paperback. Two-volume set, $3.50; $1.75 each.

These two volumes are unabridged republications of Mrs. Nice's classic studies of the Song Sparrow which originally appeared in the *Transactions of the Linnaean Society of New York*. The first part appeared in 1937 and is a population study. The second part appeared in 1943 and is a behavior study of the Song Sparrow and other passerines. The latter volume is probably of greater interest to the average amateur because it contains a wealth of information on various aspects of bird behavior readily observed by those who have considerably less than eight years to devote to an intensive study of one species.—EFP

Thoreau on Birds. Helen Cruickshank, editor. McGraw-Hill Book Company, New York, 1964. 331 p. Index. Illus. $7.95.

"What if you could witness with owls' eyes the revelry of the wood mice some night, frisking about the wood like so many little kangaroos?" asks Thoreau. This one sentence expresses his penchant for careful observation, his delight in discovering the ways of wild creatures, and his poet-philosopher approach to the study of natural history. From Thoreau's *Journal* and other writings Mrs. Cruickshank has collected passages dealing primarily with birds. Each selection is preceded by explanatory comments of historical, philosophical, or biological significance. Particularly helpful are notations of changes in nomenclature. When one considers that Thoreau amassed his ornithological records without modern field guides and optical equipment and, except for a few instances, without having the bird in hand, one can only be amazed by the accomplishments of this pioneer in the techniques of field identification.—EFP

The Book of the Pigeon and of Wild Foreign Doves. Carl A. Naether. David McKay Co., Inc., 750 Third Ave., New York, N. Y., 1964. 270 p. Illus. $5.95.

The author begins this book by stating that it is intended to further the knowledge and enthusiasm of the scores and scores of keepers of pigeons and doves. He further states "that the book is meant to be neither exhaustive nor a scientific treatise of the subject, but mainly an informative chronicle of my experiences with pigeons."

To bird students the family Columbidae includes pigeons and doves, these names being used interchangeably in different lands. There are some 700 species, many of which hybridize to please the fanciers. Twenty-one species were native to the North American continent, one less after the extinction of the Passenger Pigeon in 1914. When pigeons are mentioned, we generally think of the numerous flocks about modern buildings and in city parks. These birds, like those of the pigeon breeders, are the descendants of the Rock Dove (*Columba livia*) brought here from Europe.

Historically pigeon breeding began in Egypt about 3000 B.C. Today breeders are generally classed as fanciers, racers, and utility. The first breed birds for color, form, and excellence for show contests and personal satisfaction. The racing hobbists select and train birds for fast and sustained flight, often wagering on the race results. The utility class is for those who select and breed birds for producing choice squabs for sale. The fraternity have their own publications, and special numbered bands are issued to different hobbists.

The first chapter of this book is called "Billing and Cooing" and tells of the general habits, nidification, etc. of domesticated pigeons. Subsequent chapters deal with breeding and keeping; housing and enclosures needed;

successful methods for preparing the birds for homing and racing; selecting and breeding pigeons for show competition; and the selection of breeds, feeding, preparing, and marketing of squabs.

Chapters eight and nine are devoted to wild doves and pigeons. This deals with the capturing and caging of other members of the family found throughout the world. Fortunately our native doves are not captured legally; but some other countries are lax in this respect, and fanciers can import caged birds. Individuals, as well as zoos, can keep rare species for pride and satisfaction. The book includes some good pictures of the more exotic doves.

The author should have added that the casual finder of a pigeon band could write the American Racing Pigeon Union, 2239 S. Highland Avenue, Berwyn, Illinois, if the band is marked "AU". If the letters are "IF", write the International of American Homing Pigeon Fanciers, Box 62, Maplecrest Station, Maplewood, New Jersey.—Harry T. Davis

The Loon in My Bathtub. Ronald Rood. The Stephen Greene Press, Brattleboro, Vermont, 1964. Index. Illus. 176 p. $4.50.

Anyone who enjoyed Mr. Rood's previous book, *Land Alive*, will welcome this engaging collection of nature essays. Perhaps the most charming chapter is based on the author's recollection of donning his first pair of hip boots and wading in "his" swamp. As the title hints, one chapter describes the care of a loon found stranded on oil-slicked asphalt. This is light reading full of humor and good cheer, and the book is likely to appeal to anyone who has ever had a pet turtle or tried to care for an abandoned baby bird.—Jack Potter

The Oxford Book of Birds. Bruce Campbell. Illustrated by Ronald Watson. Oxford University Press, 417 Fifth Avenue, New York, New York. $8.00.

This book covers the 452 species of wild birds recorded and established in the British Isles. This includes transocean species and many birds of western Europe. A page on classificiation refreshes the professional and prompts the amateur as to orders and families. Six following pages discuss relations and characteristics of the birds that cause them to be so classified. An excellent drawing shows the exterior parts of a bird.

A unique device for giving the months in which a given bird can be found, can be found breeding, can be heard singing, is by the use of the numerals one to twelve. Bold type is used for the nesting months, underlining for the months of song, no numerals for months absent in the Isles, and parentheses for months when rare. All the many bird book writers in this country should read page XV.

Given this prelude, there are 96 pages of charming pictures in full color in natural setting. Plumage is shown for season, age, and sex. The effect, without glossy paper, is excellent. The word "charming" can also be applied to the carefully chosen text conveniently placed opposite each picture. This text gives characteristics of each bird, such as flight, courtship, nesting, plus aids for identification. Page 192 lists nine North American family representatives that have established themselves in the British Isles. These are illustrated in black and white.

Given this more pleasant body of the book, there follows an easy invitation to read the chapters on Bird Anatomy, Bird Flight, Behaviour and Breeding, and Migration, Numbers and Age. This is followed by a list of other publications that are recommended reading, and a listing of the organizations in the Isles that have as their purpose the studies of birds and necessary conservation. The index is complete and invites use.

In summary, the book itself is ideal for those interested in British birds, and sets a standard for those preparing bird books. Printed in Europe is again excellent in the body of the book. Unfortunately, the red binding of the review copy was warped as if it had lain in a shower. This is not in keeping and should be corrected in further production.—Harry T. Davis

NEWS AND COMMENTS

"Some Birds of North Carolina" is an interesting new film strip available from the Education Division of the North Carolina Wildlife Resources Commission at Raleigh. Included in the film are 30 bird pictures in color plus several habitat scenes. Two scripts accompany the film, one for students in the first through the sixth grades and another for older children and adults. The Commission produced 100 copies of the film strip which will be sold at cost ($2.00) to schools, libraries, and clubs interested in conservation. This film strip was enthusiastically received at the midwinter CBC meeting at Morehead City. CBC members at this meeting also previewed a working print of "Wildlife Babies," a 16 mm color motion picture prepared for the Commission by Jack Dermid. Several people described the film as being "every bit as good as anything in Walt Disney nature movies."

Durham Life Insurance Company Offers Bird Folders

The bird cards long distributed by Durham Life Insurance Company have been replaced by attractive folders which are available free of charge from local agents or the home office in Raleigh, North Carolina. One side of the folder has 23 color photographs of birds found in the southeastern United States. Each picture is backed by a paragraph containing a few facts about that particular species. Included in the folder is the White Ibis picture by Jack Potter which appeared on the cover of the September 1964 *Chat.* Other photographs were contributed by Jack Dermid, Joel Arrington, James F. Parnell, Fred L. Johns, and Eloise Potter. Durham Life Insurance Company is to be commended for its efforts to promote bird study and conservation.

Birds of the Lower Cape Fear Area

Wilmington Natural Science Club recently released a new local list, "Birds of the Lower Cape Fear Area of North Carolina." Compiled by Dorothy P. Earle and Polly E. Mebane and edited by Vivian K. Bates, the 24-page mimeographed booklet is designed primarily to meet the needs of the many visitors interested in studying the bird life of the Wilmington-Carolina Beach-Southport area. A map indicates some choice birding spots. The list includes 287 species, 46 of which are confined to the rare birds category. Except for the rare species, the status is given as permanent resident, summer resident, winter resident, or transient. Several blank pages are provided for notes and additions. Anyone interested in the birds of the coastal Carolinas will want this handy reference. Copies may be obtained by writing Mrs. C. Richard Bates, 507 N. Channel Drive, Wilmington, North Carolina. There is a charge of 10¢ per copy (coin or stamps) to cover the cost of mailing.

IN MEMORIAM

During the past few months death has claimed several Carolina Bird Club members whose contributions to bird study and conservation will be greatly missed in the years ahead. John R. Thomas of Rocky Mount, North Carolina, was killed last summer in an automobile accident along with his wife and children. Marie Vander Schalie was a Life Member of CBC and an active member of Wilmington Natural Science Club prior to her death. Bob Edwards, of McClellanville, South Carolina, a former member of the CBC Executive Committee, passed away in January.

CBC Dues Reminder

William L. Hamnett, CBC treasurer, reports that the great majority of CBC members paid their 1965 dues before the end of January and that a large number of new members have joined recently. However, he hopes that all members now in arrears will renew their memberships immediately so their names will not be removed from the mailing list.

New Facilities at N. C. State Museum

Raleigh Bird Club is now meeting regularly in the newly completed lecture hall at the N. C. State Museum. Adjoining the lecture hall are the library and the study collections room. Beginning this spring, museum visitors will be invited to attend programs in the lecture hall each Sunday afternoon.

Cocoa Does It Again!

The Christmas Bird Count team at Cocoa, Florida, claimed a new national record after finding 204 species on 29 December 1964. The same well-organized group, headed by Allan D. Cruickshank, held the previous record of 200 species recorded in 1960.

New Curator-Exhibits Designer

Jean Du Val Kane joined the staff of the N. C. State Museum last October as a natural science curator-exhibits designer. He came to Raleigh from Daytona Beach, Florida, where he served as director of a municipal museum. A graduate of the University of Florida, Kane has eight years experience in museum work. Jean and his wife, Judith Anne, are the parents of one child, a boy born since they moved to Raleigh. When not too busy caring for the baby, Mrs. Kane operates their home banding station.

High Percentage of Bald Eagles Carry DDT

Research by scientists of the Department of the Interior shows that a high percentage of Bald Eagle carcasses in North America have pesticide residues. This is one of the findings in the annual report of Interior's Fish and Wildlife Service on pesticide research. The purposes of the continuing study are to determine the kinds and amounts of pesticides that are injurious to fish and wildlife and to assist in discoverng ways to achieve pest control with less hazard to fish and wildlife resources.

Researchers studied 58 Bald Eagles that were found dead or unable to fly in 20 states and 2 Canadian provinces. Autopsies showed that at least 16 (possibly 24) of the eagles had been shot, 3 had been sick, and the others had died of unknown causes. Residue analyses were made of some organs in 56 of the 58 eagles. All but one (from Alaska) contained detectable DDT residues: up to 82 parts per million of the liver and up to 68 parts per million of the muscle. In addition, 5 eggs of 3 other Bald Eagles were analyzed and all 5 showed DDT residues ranging up to 40 parts per million.

These findings, researchers said, indicate that eagles in the wild have access to DDT and take substantial quantities into their bodies. They pointed out, however, that the existence of residues at the levels detected does not tell what effects, if any, such chemicals may have had either on the adult eagles or on the eggs. Earlier studies of the effects of pesticides on eagles showed that they can be killed by 160 parts of DDT in a million parts of their diet within 100 days. The birds varied greatly in how much pesticide residues they accumulated. They gained residues when they ate contaminated food and eliminated them when they ate clean food.

The annual report also discusses the effects of pesticides on marine life, captive birds of several wild species, and a tidal marsh treated with 1/5th of a pound of DDT per acre. Copies of the report, "Pesticide-Wildlife Studies, 1963," Circular 199, may be obtained without charge from the Fish and Wildlife Information Office, Department of the Interior, Washington, D. C., 20240.

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A NORTH AMERICAN NEST-RECORD CARD PROGRAM

In January 1965, the Laboratory of Ornithology at Cornell University began to operate a nest-record card program on a continent-wide basis and would like the assistance of Carolina Bird Club members.

Through the cooperation of Dr. David B. Peakall and the Onondaga Audubon Society, the Laboratory has carried on a nest-record card program on a local basis for two years. The aim of the program which is similar to one used in Britain (see Mayer-Gross, 1962, *Bird Study* 9:252-258), is to collect specific data on bird reproduction in a form convenient for statistical analysis. The results of this two-year trial have been so gratifying that we are encouraged to make the program continent-wide.

For this to be a success we will need the cooperation of all bird observers in all parts of the continent, particularly the United States and Canada. We will also need—because we are certain that regional centers can handle the distribution of data cards and their return to the Laboratory better than individuals—the cooperation of all bird clubs and other societies whose members make field observations of birds.

The Laboratory will provide bird clubs or individuals with cards. The observers will record the contents of each nest found on a separate card and make dated notations on the same card for each subsequent visit to the nest. Each card will then contain all the data from a single nesting. While one observation of a nest will be valuable, additional observations over a period of days or weeks will increase the worth of the record. Our goal is to have hundreds, possibly thousands, of cards containing data on each species from all parts of its range.

We are well aware that there are other local nest-record card programs in this country and in Canada (see Peakall, 1964, *Audubon Field Notes*, 18:35-38), and, naturally, we do not intend to infringe on them in any way. We only hope that they will cooperate with us and help broaden the scope of the whole endeavor. The net result should be the accumulation of far more data on every species than heretofore and the centralization of these data for comprehensive and intensive study, much as is true of the bird-banding program of the U. S. Fish and Wildlife Service. All of the information from our program will, of course, be available to anyone who is interested.

Clearly this is a program in which every person seriously interested in birds can participate, be he a seasoned nest finder or one who merely watches a nest from a window. Local organizations, or individuals not members of local groups, may address all inquiries and communications to the North American Nest-Record Card Program, Laboratory of Ornithology, Cornell University, Ithaca, New York 14850.

Olin Sewall Pettingill Jr., *Director*

BRIEFS FOR THE FILES

(Continued from Page 30)

N. C., 27, 29 September and 1 October, R. J. Hader. • **Cerulean Warbler,** 1, Bodie Island, N. C., 3 September, "may be a first for the area," Paul W. Sykes Jr. • **Palm Warbler,** 180 counted, Bodie-Pea Island area, 10 October, H. Lee Jones, Paul W. Sykes Jr. • **Connecticut Warbler,** 1 on 19 and 26 September, 10 October, Bodie-Pea Island area, Paul W. Sykes Jr.

Baltimore Oriole, 52 counted on afternoon of 2 September, 31 of these in one flock; 2 at same location 11 October, Pea Island, N. C., Paul W. Sykes Jr. • **Dickcissel,** 1 immature, 20 June; 1 adult male, 29 July, both at Wilmington, N. C., Mrs. Birdie Menzer; 1 male, 35 miles N of Wilmington, N. C., 9 July, Mrs. Polly Mebane. • **Evening Grosbeak,** 1 female, Statesville, N. C., window feeder, 20 December, Ronnie Underwood. • **Lark Sparrow,** 1 in oak avenue, Wadmalaw Island, S. C., 9 September, B. R. Chamberlain. • **White-crowned Sparrow,** 1 immature, Bodie Island, N. C., 8 November, Carl W. Carlson. *All dates 1964 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

NEWS AND COMMENTS

(Continued from Page 34)

The Challenge is Clear

Surveying early air routes, I watched fence lines rush westward over lands where antelope and buffalo had grazed. All around the world I have listened to men telling how birds and animals dwindled in numbers and then disappeared as civilization progressed. On every continent, and in almost every country, the crisis for wildlife is acute. If present trends continue, the extermination will be appalling and it can never be redressed.

Man can stop the extermination of animals if he has the desire to do so. To what extent he has this desire will, I think, be the measure of his greatness—whether he places more value on his own material accomplishment or on God's miracle of life. The extermination of animals can be stopped: through the action of a nation's statesmen, through a small fraction of the support philanthropic foundations give to physical and intellectual sciences each year, through interest and donations on the part of individuals who believe as I do, that life itself is more important than any material accomplishment life makes.

This is why I have been devoting attention to the wildlife I flew over with too little thought in decades past. There is no time to lose. Some species now number only dozens, where thousands existed not very long ago; and with all the progress of our science, we cannot replace a species once extinct.

But conservation measures can still be effective in most instances. More national parks are needed. More game reserves are essential. Information and skilled assistance must be made available to governments of both old and newly established countries.

Is civilization progress? The challenge, I think, is clear; and, as clearly, the final answer will be given not by our amassment of knowledge, or by the discoveries of our science, or by the speed of our aircraft, but by the effect our civilized activities as a whole have upon the quality of our planet's life—the life of plants and animals as well as that of men.—CHARLES A. LINDBERGH (From *Reader's Digest*—July 1964)

Carolina Bird Club
INC.

Founded March 6, 1937 *Incorporated August 8, 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Supporting, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of The Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat*. Subscription price to non-members is $1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to the *Distribution Office*: N. C. State Museum, Box 2281, Raleigh, N. C. Please notify the Distribution Office immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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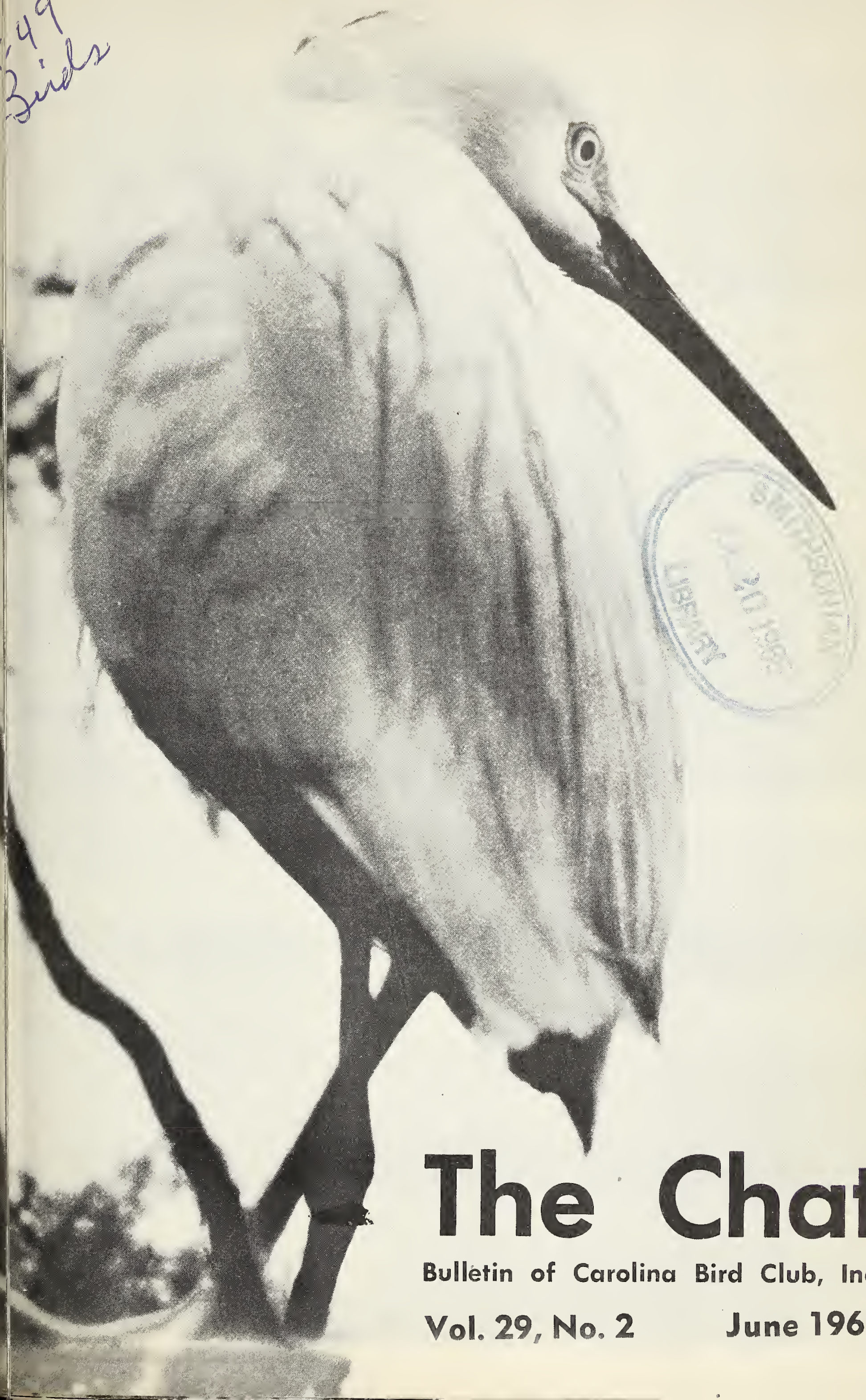

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The Chat

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Vol. 29, No. 2 June 1965

The Chat

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EDITOR .... Eloise F. Potter, Box 487, Zebulon, N. C.
GENERAL FIELD NOTES .. B. R. Chamberlain, Rt. 1, Wadmalaw Island, S. C.
BACKYARD BIRDING .... Annie R. Faver, Rt. 2, Eastover, S. C.
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Cover Photo—Walter Dawn photographed the Snowy Egret on Drum Island, Charleston County, S. C. In this issue T. A. Beckett III tells about his bird banding on Drum Island and the need for adequate protection of the heron colony there.

PRESIDENT'S PAGE

The Clemson, South Carolina, Spring Field Trip meeting held 30 April and 1 May, turned out to be successful in more ways than one. The weather was perfect; 86 members were registered; five States were represented; the food was excellent; and the local field trips resulted in 117 bird species identified.

Due to ill health, Vice-President Charles Nichols resigned several months ago. In this emergency, I asked Gaston Gage if he would take over Mr. Nichols' responsibilities for this meeting in arranging accommodations at the Clemson House, registering members, and planning local field trips. He graciously accepted and the results of his efforts were well in evidence. Our sincere appreciation and praise are extended to Mr. Gage and to all those who assisted him.

Officers elected for the coming year are *President*, Col. Norme D. Frost (for second term); *1st Vice-President*, Richard Siler (second year); *2nd Vice-President*, Garvin Hughes (first year); *3rd Vice-President*, Mrs. W. C. Stone (replacement for Charles Nichols for his third year); *Secretary*, Kay Sisson; *Treasurer*, William Hamnett; and *Members-at-large*: Dr. J. O. Watkins (3rd Region), T. A. Beckett (3rd Region), John L. Lamson (2nd Region), and Linville L. Hendren (1st Region). The above constitutes your new Executive Committee. Other committees are to be appointed and announced later.

I regard the honor of being retained in office for a second term with all seriousness, and I will give my best effort to an effective functioning of this office. I express my appreciation for the support and work done by those who are leaving the Executive Committee, and I look forward to working with the new members who will replace them. It is hoped that others who are called for committee work will accept and volunteer their services as have the rest of us.

This next year is an important period, and important decisions, no doubt, will have to be made. It is my intention to have the results of all committee and General Assembly decisions and actions published for the benefit of all concerned. I encourage members to express their views and to ask questions concerning the management and operation of their Club. These will be duly answered to the best of my knowledge.

The major item of business at the Clemson meeting was the passage of the Proposal to raise the Regular Membership dues from $1.00 to $2.00, effective 1 January 1966. During the discussion, several members stood and gave sound reasons for their support of the Proposal. Throughout the discussion and vote, not a single voice was heard in dissention, and the Proposal was passed with complete and enthusiastic unanimity. A number of members who could not be present, voluntarily sent to me their "proxy" votes on the Proposal, but these could not be validly considered, except that their initiative demonstrated interest in the future of their Club.

I list here some suggestions (submitted to me from interested members) which justify financial support, commensurate with funds available: 1) Sponsor a nature camp for high school and college students where they could work in the field with skilled biologists, nature photographers, bird banders, etc. 2) Buy, or assist in buying, land for a wildlife refuge. 3) Create more interest and participation in conservation of all forms of wildlife and in our natural resources in the Carolinas. 4) Launch a campaign against continued destruction of birds, particularly bluebirds, in tobacco curing barns. 5) Publish a field manual for bird study in the Carolinas. 6) Publish attractive nature study and conservation booklets for distribution through schools and museums in the Carolinas. 7) Award fellowships to graduate students for specific field work designed to fill gaps in our knowledge of ornithology. 8) As for the *Chat*: Reprint back

SMITHSONIAN INSTITUTION JUL 16 1965

issues so that members can acquire them; make the *Chat* bigger and better; create a young naturalists' page; create a teachers' workshop page; create a conservation department similar to "Backyard Birding"; engage a suitable commercial printing shop to meet all of our printing and mailing requirements. 9) Improve the News Letter to include more Club news and informal items not included in the *Chat*.

The CBC and the *Chat* have come a long way, but certainly, we should not consider that our work has been completed, nor should we rest upon our laurels. There were 1,500 copies ordered printed for the March issue of *Chat*. This number, however, does not represent the actual membership number. On 5 April, our headquarters reported to me that there were 1,272 members currently paid up in their dues. Extra bulletins are always ordered for such purposes as exchange memberships, for complimentary mailings, and for a limited reserve for other requests. At the end of the next twelve months, I would like to see an actual membership of 1,500. Such a goal isn't unreasonable, especially if each member will do a little work and bring in a new member.

Another item of business receiving unanimous approval was a Resolution in connection with the Smith Island complex at the mouth of the Cape Fear River. Your President was directed to send letters in behalf of the CBC, giving its moral support for the retention of the island as a North Carolina coastal wildlife sanctuary, to the following: the owner of the island; the Governor of North Carolina; the Secretary of the Interior; and to such other parties as are known to be interested in the future of the island. The island is the last of its kind along the North Carolina coast, and is comparable to Bull's Island, off the South Carolina coast. If the island is not saved, it will be lost forever to commercial development.

It has taken me the entire year to become acquainted with the many details and situations that involve the management and operation of the Club. I fully realize the seriousness connected with sponsoring the raising of the dues which, by the way, was attempted back in 1956-57, without success. As one member so well put it to me, "I voted against it then, but times have changed during these past nine years, so this time I voted for it." Obviously, many members have agreed with her.

With this new vote of confidence, your Executive Committee can exercise its responsibilities commensurate with the net increase in revenue.

NORME D. FROST

ANNUAL STATEMENT ENDOWMENT FUND
CAROLINA BIRD CLUB
8 April 1963 - 8 April 1965

Balance Bank (Savings Department) First National Bank of South Carolina 8 April 1963	$411.86
Received from Mrs. George Potter in Memory of George Potter	15.00
Interest Savings account (2 years)	27.40
Interest U.S. Savings Bonds "K" (2 years)	27.60
Interest U.S. Savings Bonds "H" (1½ years)	28.95
Bank Balance Commercial National Bank of South Carolina (Savings Dept.) 8 April 1965	$510.81

Assets: 8 April 1965

U.S. Savings Bond "K"	$500.00	(Registered)
U.S. Savings Bond "H"	$500.00	(Registered)
Savings account	$510.81	
	$1,510.81	

Ellison A. Williams, Investment Chairman

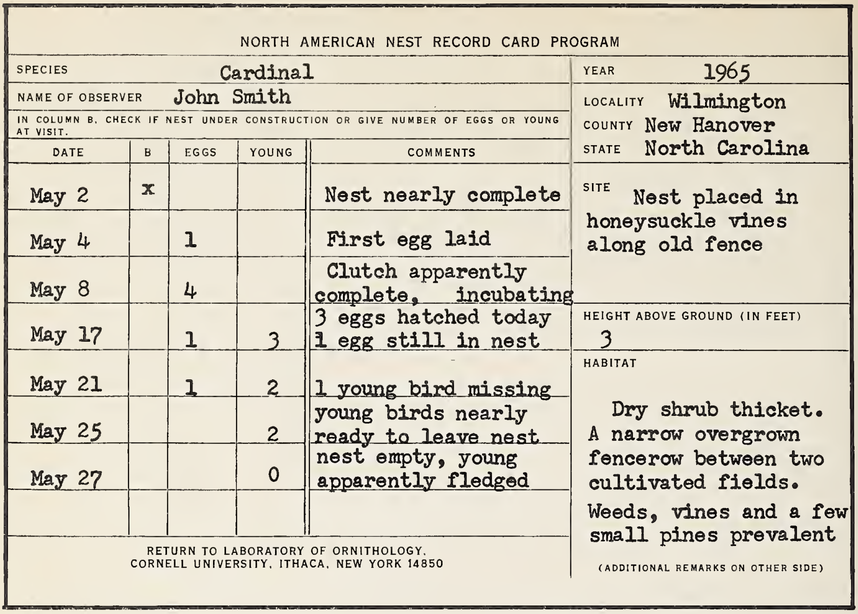
TREASURER'S REPORT—CAROLINA BIRD CLUB, INC.

1 April 1964 - 31 March 1965

Income to Club:	$3,206.57	
Expenditures by Club	3,475.64	
Expenses:		
Chat:		$2,657.61
March 1964	396.55	
June 1964	276.97	
September 1964	725.42	
December 1964	375.45	
Index	448.05	
Editor's expenses ($185.00 for her time)	215.71	
Typing membership list	84.00	
Bulk mailing permit	20.00	
Returned Chats	6.01	
Postage	5.00	
Envelopes	104.45	
	$2,657.61	
Newsletter:		148.53
Envelopes	30.15	
Stamped envelopes	68.17	
Paper	29.41	
Mailing permit	20.00	
Twine	.80	
	$148.53	
Office Materials and Supplies:		148.19
Check book	1.00	
Renewal post cards	13.00	
Stationery and membership cards	101.55	
Addressograph plates and repairs	32.64	
	$148.19	
Miscellaneous:		406.31
Audubon Society dues	25.00	
Treasurer's stamp	5.05	
Speaker's expense (Cutts)	25.00	
President's expense (Film rentals, postage, office supplies)	77.73	
CBC patches	273.53	
	$406.31	
Audubon Camp Scholarship (Mrs. Pocohontas Childress)	$115.00	115.00
Summary:		
Cash balance 1 April 1964	$2,766.61*	
Income for reporting period	3,206.57	
	$5,973.18	
Expenditures for reporting period	3,475.64	
Cash balance 31 March 1965	$2,497.54	
In Checking: 31 March 1965	$2,497.54	
In Savings: 31 March 1965	3,231.79	
Treasury of CBC	$5,729.33	

W. L. Hamnett, Treasurer

* This is $14.00 more than cash balance 31 March 1964 on last report because of deposit 27 March 1964 not being included.



NORTH AMERICAN NEST RECORD CARD PROGRAM

SPECIES Cardinal

YEAR 1965

NAME OF OBSERVER John Smith

LOCALITY Wilmington

COUNTY New Hanover

STATE North Carolina

IN COLUMN B, CHECK IF NEST UNDER CONSTRUCTION OR GIVE NUMBER OF EGGS OR YOUNG AT VISIT.

DATE	B	EGGS	YOUNG	COMMENTS
May 2	x			Nest nearly complete
May 4		1		First egg laid
May 8		4		Clutch apparently complete, incubating
May 17		1	3	3 eggs hatched today 1 egg still in nest
May 21		1	2	1 young bird missing
May 25			2	young birds nearly ready to leave nest
May 27			0	nest empty, young apparently fledged

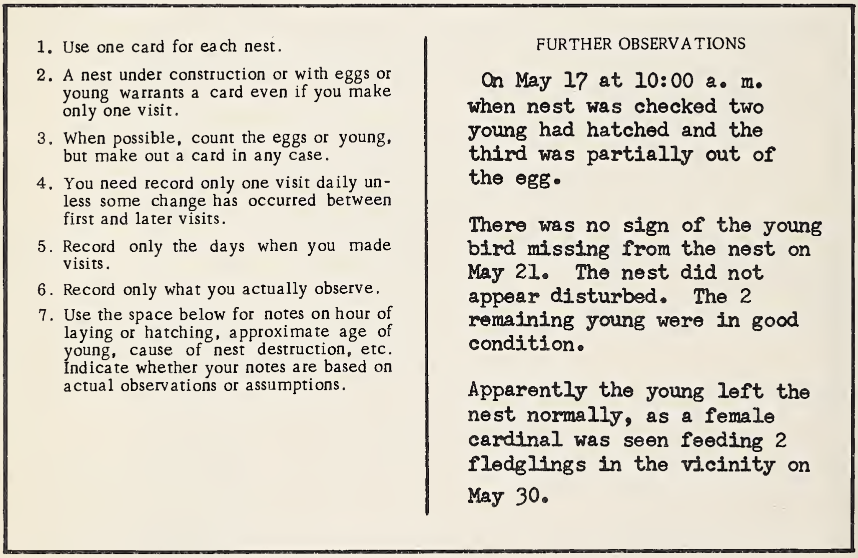
SITE Nest placed in honeysuckle vines along old fence

HEIGHT ABOVE GROUND (IN FEET) 3

HABITAT Dry shrub thicket. A narrow overgrown fencerow between two cultivated fields. Weeds, vines and a few small pines prevalent

RETURN TO LABORATORY OF ORNITHOLOGY,
CORNELL UNIVERSITY, ITHACA, NEW YORK 14850

(ADDITIONAL REMARKS ON OTHER SIDE)



1. Use one card for each nest.
2. A nest under construction or with eggs or young warrants a card even if you make only one visit.
3. When possible, count the eggs or young, but make out a card in any case.
4. You need record only one visit daily unless some change has occurred between first and later visits.
5. Record only the days when you made visits.
6. Record only what you actually observe.
7. Use the space below for notes on hour of laying or hatching, approximate age of young, cause of nest destruction, etc. Indicate whether your notes are based on actual observations or assumptions.

FURTHER OBSERVATIONS

On May 17 at 10:00 a. m. when nest was checked two young had hatched and the third was partially out of the egg.

There was no sign of the young bird missing from the nest on May 21. The nest did not appear disturbed. The 2 remaining young were in good condition.

Apparently the young left the nest normally, as a female cardinal was seen feeding 2 fledglings in the vicinity on May 30.

NEWS AND COMMENTS

Fourteen people enrolled for the ornithology field course offered at North Carolina State University at Raleigh 4 April through 6 June 1965. Conducting the course was Will Hon, author of *Bird Study in the Mid-South,* which was used with the course. Each field trip was preceded by a lecture on the habitat and ecology of the area to be covered. Taking the course were Mr. and Mrs. Malcolm Campbell, Jean Cooper, Dorothy Hardin, Mr. and Mrs. Arnold Hoffman, Nick Elliott, Mrs. Charles E. Richardson, Darryl Moffett, Mike Browne, Mark Thompson, and Ed Foil Jr., all of Raleigh; Louise Crumpacker and Mrs. Paul S. Payne of Durham.

Conservation in the Carolinas

Several CBC members have suggested that *Chat* needs a conservation department and your Editor agrees. But finding someone willing and able to organize and edit a new department is no easy matter. Finally Gladys Buckner volunteered to try it on an experimental basis. If you find "Conservation in the Carolinas" interesting and want it continued, it is up to you to let Miss Buckner know what is being done about conservation in your community and to express your opinions about what should be done in the field of conservation throughout the Carolinas. Miss Buckner's address is 500 West Avenue, North Augusta, South Carolina. Let her hear from you soon.

Information Requested

Richard H. Peake requests that CBC members send him information concerning the bird life of Cashiers, High Hampton, and Gorge area or of any locality in Jackson County, North Carolina. His address is Box 163, Cullowhee, North Carolina.

A. L. Pickens asks that CBC members send him new records of flowers visited by Ruby-throated Hummingbirds and the color of these flowers. He is also interested in the names of flowers that birds *do not visit.* Information should be sent directly to Dr. Pickens at 1729 Lombardy Circle, Charlotte, North Carolina 28203.

Eloise F. Potter is seeking data on the molts of certain species which nest commonly in the Carolinas. She is particularly interested in the onset of the postnuptial molt of the Robin, Catbird, Brown Thrasher, Starling, and Common Grackle. Mrs. Potter's address is Box 487, Zebulon, North Carolina 27597.

Wilmington Club Busy

Wilmington Natural Science Club, under the leadership of its new president James F. Parnell, is actively supporting efforts to preserve Smith Island. (For further information see President's Page and Conservation in the Carolinas, elsewhere in this issue.) Several club members are making a breeding bird census for *Audubon Field Notes.* The club also plans to sponsor—just for fun—a Fall Bird Census, following the same rules used

NEST RECORD CARD PROGRAM—James F. Parnell will serve as the Regional Center for North and South Carolina in cooperation with the North American Nest Record Card Program being conducted by the Cornell Laboratory of Ornithology. Dr. Parnell's address is the Department of Biology, Wilmington College, Wilmington, North Carolina. Cards and instruction sheets may be obtained from Dr. Parnell, and the completed cards should be returned to him. A completed sample card, slightly reduced in size, is shown on the opposite page. Please remember that a single visit to a nest justifies filling out a card, even though additional visits are desirable.

for the Christmas and Spring counts. Immediate past president Vivian Bates reports that the club's *Birds of the Lower Cape Fear Area* (*Chat*, 29:33) has been so much in demand that additional copies may have to be printed. Requests have come from as far away as New Hampshire, Illinois, and Iowa.

Importance of Vernacular Names

T. A. Beckett III is concerned about the elimination of vernacular names in the latest volume of Peters' *Birds of the World.* "Is it not strange," Beckett asks, "that Peters was able to edit six volumes of this series using vernacular names, Mayr and Greenway the next two, and then suddenly Mayr and Paynter find that 'polls and other elaborate procedures are beyond the scope of a scientific work'? The editors agree in the introduction that the field of amateurs is expanding and that vernacular names would be of assistance to this group. They also state that the editor's job is editing. Let the authors do the selecting of the vernacular names used.

"It is my opinion that the vernacular names are of assistance to any birder—amateur or professional. It is common knowledge that the pros do not know all of the scientific names—just test them with a book in hand. In the field the Latin names mean nothing to the general public. How many field men would say they had ever seen a *Corvus brachyrhynchos*? Every one of them knows the crow by its common name.

"Is it not possible that the same 'general demand' to which Peters referred in the introduction to Volume 2 still exists, even more strongly now through sheer numbers? Thirty years is a long time and the table of contents covers few pages. No one can argue Peters' point in regard to inventing common names, but let's hope the editors of future volumes of *Birds of the World* will condescend to the vernacular for scientists in other fields and for that ever growing 'queer' group known as bird watchers who sometimes refer to Peters' works."

Lost and Found

A valuable binocular was left at the desk at the Clemson House the weekend of the CBC meeting there. Unless it has already been claimed, the owner should notify the manager immediately.

To Conduct Tour

Alexander Sprunt Jr. will conduct a "bird-watching cruise" aboard the American President S.S. Lines ship *President Wilson,* sailing 23 September 1965 from San Francisco to the Orient via Hawaii and returning 30 October. Local ornithologists will meet and accompany the group at the various ports-of-call. Dr. Sprunt will give illustrated lectures aboard ship. Many oceanic birds such as albatross, fulmar, and shearwaters can be expected. Requests for full details should be addressed to American President Lines, International Building, 601 California Street, San Francisco, California.

IN MEMORIAM

Catesby Bird Club of High Point, North Carolina, lost one of its most faithful members when Bess Siceloff died 5 May 1965. Also a member of Carolina Bird Club, Miss Siceloff contributed much of her time to bird study and conservation.

DRUM ISLAND 1964

THEODORE A. BECKETT III

Drum Island lies under the Cooper River bridge which joins the city of Charleston with the city of Mount Pleasant. Over this bridge thousands of cars follow Route 17 north and south. Few, if any, of the occupants of these cars realize that the seemingly small shrubs on the area viewed from the height of the bridge are in many cases trees with heights of 20 to 25 feet.

The north portion of this island is actually used by the bird breeding colony and probably covers less than 10 acres. The highest points are not over 5 feet above high water mark. Its elevation is gradually being raised by dredgings from the Cooper River.

Drum Island is bordered by the usual marsh grasses (*Spartina* sp.) and rushes (*Juncus* sp.) and salt myrtle *(Baccharis halimifolia)* with a few wax myrtles *(Myrica cerifera)* interspersed with a weak growth of tamarisk *(Tamarix gallica)*. The interior is composed mainly of a heavy and luxuriant growth of wild mulberry *(Morus nigra)* trees with a few cabbage palmetto *(Sabal palmetto)*, yaupon, wax myrtle and patches of rather large salt myrtle. There are several large patches of yucca *(Yucca gloriosa)* but these will probably be shaded out in future years.

The very nature of the sediment immediately inside the enclosing dikes makes walking in wet weather difficult, and impossible during periods when the dredges are pumping spoil into the area.

HISTORY

For many years the nesting species of Drum Island furnished a large portion of the crab bait, placed in traps, by commercial crabbers. In recent years more rigid law enforcement has brought an end to this practice. Due to rather difficult access this colony has had very little attention from out-of-town ornithologists. For almost 15 years it has been checked at least twice a year by Ernest Cutts to determine nesting dates and composition of species of the colony.

1964 NESTING SEASON

During the 1964 season the colony was visited by the writer almost weekly except for two weekends in July when the weather did not permit boat-launching and the nestlings would have been harmed by the mere presence of man. The first visit to the colony was made on 8 March. At this time Black-crowned Night Herons *(Nycticorax hoactli)* and Common Egrets *(Casmerodius egretta)* were already incubating full clutches of

TABLE 1. *Banding on Drum Island in 1964*

Species	*Number Banded*	*Active Period of Banding* April	 May	 June	 July	 August
White Ibis	2862		——	- - - - -	-	
Glossy Ibis	162		—	- - - - -	-	
Common Egret	253	-	- ——	- - - -	- - - -	- - -
Snowy Egret	230		- ——	- - - -	- - -	
Louisiana Heron	521	-	———	———	- - - -	
Little Blue Heron	969	- -	- - - —	- -		
Cattle Egret	465			——	———	
Green Heron	1			-		
Black-crowned Night Heron	127	- - -	- - - -	———	- - - -	- - - - ?
Yellow-crowned Night Heron	10	?	-			

eggs. Little Blue *(Florida caerulea)* and Louisiana Herons *(Hydranassa ruficollis)* were building nests as were the White Ibis *(Eudocimus albus)* and Glossy Ibis *(Plegadis falcinellus)*. No Cattle Egrets *(Bubulcus ibis)* were present on this visit, nor were any Yellow-crowned Night Herons *(Nyctanassa violacea)* seen.

Periodic visits were made weekly until the first nestlings, Little Blue Herons, were ready for banding. Nearly all visits were made on Saturdays or Sundays due to limited time for work in this particular colony. On two weekends both Saturday and Sunday visits were made in order to band the young before the fledglings left the nest. It must be borne in mind that several other colonies were under observation and an attempt was not made to study the life habits during the time of these visits. In most cases there was a terrific amount of energy expended under the most adverse conditions in efforts only to band birds and check the progress of the colony as a whole. Mosquito nets were necessary as well as heavy jackets when the mosquito population built up in late June.

It is my personal opinion that if a large number of birds can be banded initially to a saturation point, much more can be learned in the future by working with birds of a pre-determined age. We do not know positively at what age most species begin to breed in the wild. By trapping or netting breeding birds that have been banded in previous years, this can be ascertained accurately. There is the possibility that age may be correlated with clutch size and success in number of young fledged. Color banding in the Cattle Egret is planned for the 1965 banding season with red plastic bands to be used for all colonies in South Carolina.

Table 1 shows the total number of birds banded on Drum Island in 1964, with the exception of a few banded by visiting ornithologists from out-of-town, and dates of peak banding with extremes are shown. It is quite apparent that the Black-crowned Night Heron has the longest nesting season of all species present. In fact, on the last visit, 15 August, both unhatched eggs and young too small to band were still present in several nests.

MORTALITY

On 6 June a young Black-crowned Night Heron was found with a freshly killed White Ibis nestling dangling from its mouth (*Chat*, 28:93-94, 1964). The heron was attempting to disgorge its prey. Between 50 and 60 disgorged young White Ibises were found in the colony. Later in the nesting season, 15 August, I found two broods of Black-crowned Night Herons which had fed on nestling Cattle Egrets. While the consumption of the young of other species by the Black-crowned Night Heron is a mortality factor needing further investigation, it is apparently insignificant compared to the destruction caused by man.

This colony was hard hit by the application of granular BHC for mosquito control. On the morning of application (11 June) I had a newspaper reporter present at Drum Island when the chemical was being broadcast by airplane directly on the nestlings and the surrounding marsh. The great damage came indirectly from the feeding of marine life killed by the chemical to young in the nest. Several hundred young were found in all stages of paralization for about 3 weeks after application. There was a later kill caused apparently from the young drinking and feeding in the various water holes on the Island after leaving the nest.

There was an additional kill among the Cattle Egrets for which I have no explanation. Since the Cattle Egret is the last species to nest in great numbers, care was taken to have about 2,000 bands on hand for the peak weekend, expected about 1 August. I can only say that between two and three thousand week-old nestlings disappeared between 4 July and 19 July when they should have been of the right age for banding.

There was a light kill along the perimeter of the colony when heavy equipment, such as draglines, was brought in for construction of the new bridge; but this did not involve over 200 nests and most of these contained only eggs.

If this colony can be protected from human exploitation, there is every indication that it will expand in numbers as the vegetation continues to cover the areas raised by dredging.

NESTS

To date the most numerous species and still increasing, the Cattle Egret has caused little conflict by crowding. Probably two-thirds of the nests used by this species are those previously used by the early nesters, such as White Ibis and Snowy Egret. Only the early nesting pairs seem to build, or in many cases even repair the old nests. In several instances during the past two years young Cattle Egrets were banded in nests previously marked as used by earlier nesting species. The above is of course opposite to the report of Skead in *Handbook of North American Birds* by Ralph S. Palmer (1962, p. 445). Adams (*Chat*, 27:65-68, 1963) pointed out that the Battery Island Cattle Egrets did not peak in numbers until nearly all other species had left the colony. It is my opinion that a close check in this colony will show much use by this species of the nests of other earlier nesting species. This is particularly true of the pairs of Cattle Egrets arriving late for breeding purposes.

In general, the nests of the *Ciconiidae* (storks and wood ibises) are readily distinguished from those of the *Ardeidae* (herons and bitterns), the former usually being of greater depth and formed with much more nesting material. In the case of the Glossy Ibis (family *Threskiornithidae*) green twigs are constantly added to the nest during its occupation.

The Black-crowned Night Heron shows a great fondness for the low growing yuccas and frequently nests on the ground between the stems. Frequently the young are found impaled on the stiff spines of the leaves.

POPULATION TRENDS

There is every indication that the Glossy Ibis will continue to increase in numbers as it has done since it was first found nesting on Drum Island by Cutts in 1956 (*Chat*, 20:79, 1956). At the present time I know of no other colonies in the state containing breeding Glossy Ibis.

The breeding population of White Ibis probably consists of close to 4,000 pairs and is due at least partially to abandonment of some of the other nesting sites formerly used by this species. There appears to be some danger that the White Ibis may drive some of the less aggressive species, such as the Snowy Egret, from the colony.

The Common Egret has greatly decreased in numbers and is nesting much later than in former years. It is quite possible that this species may at times raise two broods and this may account for some of the very late young banded this season. Only banding can answer this question.

This season is the first one that has shown the presence of the Green Heron *(Butorides virescens)* nesting. I think this species much prefers to nest over water, but frequently does nest on high land.

I expect the Snowy Egret will probably be pushed from Drum Island since it seems to be a later nester and much less aggressive than other species present. I have observed in the past at Magnolia Gardens the almost complete elimination of the Snowy Egret by an influx of the earlier nesting Little Blue Heron.

IDENTIFICATION PROBLEMS

There is so little known about the Yellow-crowned Night Heron that an attempt will be made to concentrate on the few nests of this species during the coming season. There is much confusion of identification of this species when in the banding stage. This I can say for sure: if the bird is large enough to band, the plumage of this species will be much darker and more on the slaty side rather than the brown of the Black-crowned Night Heron.

There have been many problems of identification between the Snowy Egret and Little Blue Heron that have yet to be ironed out; but it is my belief that after a visit to this colony during the past nesting season by W. T. Van Velzen, the banding office has a much better picture of our problems in the field. There is either some laying of eggs in the other birds' nests or else the rules for identification of nestlings are not holding up.

NEED FOR PRESERVATION

At the present an attempt is being made to acquire the area containing the Drum Island colony so that it will not be commercialized and will be better patrolled by wildlife agents. To my knowledge there are only two cities other than Charleston that contain heronries, Gainesville, Florida, and Stone Harbor, New Jersey. Of the three, Charleston has many times the number of breeding pairs, is much less known, and is certainly not appreciated or publicized to any extent by the local citizenry. It is the feeling of a few of Charleston's naturalists that this particular type of habitat is not so important because many other sites are available. My only answer is that these "other sites" are not being used by the birds, cannot be so readily controlled, and above all, there is no assurance that any other site will be preserved for future use. Already some of these sites have been abandoned due to commercialization through drainage, road construction, or other causes not readily discernible to the eye. The Drum Island heron colony can be preserved, studied, and made a focal point for conversation for visitors if only its aesthetic value can be made known in time and a material value not be required in order to save it.

15 March 1965
Magnolia Gardens
Johns Island, South Carolina

It's feeding time for a Common Egret nestling. The photograph was taken by Joel Arrington at Battery Island, N. C. Now protected from plume hunters, this showy wader will again be endangered unless conservationists are successful in their efforts to protect active heronries and preserve coastal marshes. (Courtesy N. C. Wildlife Resources Commission)

CONSERVATION IN THE CAROLINAS

Gladys Buckner

As wildlife living space steadily dwindles with the expanding needs of increasing human population, conservation of our wildlife resources should be the concern of everyone. The end results of the extensive use of pesticides, the draining of marsh lands, or the pursuance of any project involving a major change on the face of the land should be examined with care.

Within the environs of Charleston, South Carolina, are two wildlife areas that should be of interest to the conservationist. T. A. Beckett III has supplied the following facts:

Deveaux Bank, little more than a large sand bank off the east side of Johns Island, has a breeding population of some 20,000 Royal and Cabot's Terns, Gull-billed and Common Terns, and Black Skimmers as well as Laughing Gulls, Brown Pelicans, Willets, and Oystercatchers. Its highest elevation is probably about 12 feet above high water mark, and its lower areas are completely flooded by spring tides at which time all eggs and young present are destroyed. The terns and skimmers are the birds usually affected by the high tides; the others usually nest among the higher dunes.

Though these birds that lose their eggs and young renest, usually on higher ground, they do not avoid destruction by making use of other available and seemingly suitable sites. This condition man cannot remedy.

Arrangements have been made for the South Carolina Wildlife Commission to post the Deveaux Bank nesting area. This precaution, along with the present patrolling for turtle egg hunters, should provide protection from marauders during the breeding season. But the great danger to the colony lies in the lethal effects of chemicals contained in the colony's food source. How to eliminate this danger has not yet been determined.

Drum Island, situated within the Charleston city limits between two channels in the Cooper River, spanned by the Cooper River Bridge and used as a base for some of the bridge supports, offers a challenge to the conservationist.

This island is used in the breeding season by a colony of some 25,000 Common, Snowy, and Cattle Egrets, Little Blue Herons, and Glossy and White Ibis, the White Ibis and the Cattle Egret being the dominant species.

Here high tides are not destructive to the birds. However, the level of the island is being gradually elevated by the dredging of silt from the channels and high mortality results if the dredging operation occurs at the time the fledglings leave the nest because the young birds wander into the soupy mixture and are drowned.

An attempt has been made, without success so far, to obtain from the owners an extended lease on the island to prevent exploitation of this waterfront property. The South Carolina Wildlife Commission, if given authority by the owners, has expressed willingness to aid in the conservation of this colony. It is now patrolled by both state and federal game wardens who prevent such destruction as the use of nestlings as crab bait. On the other hand extensive losses are sustained at times from the use of chemicals to destroy mosquitoes in the surrounding marshes.

As yet there is no group project involved in the protection of either Drum Island or Deveaux Bank bird colonies, though several are interested in such a project.

Smith Island Resolution

Carolina Bird Club members meeting at Clemson, South Carolina, 1 May 1965 unanimously adopted a resolution supporting the efforts of various scientific and conservation groups to preserve in its natural state Smith Island, which is located in North Carolina at the mouth of the Cape Fear River. Smith Island is the only portion of the North Carolina coast still covered with large trees, as were most of the barrier islands when the first settlers arrived. Included in the Smith Island complex is Battery Island, site of North Carolina's famous heron colony and the only known nesting place of the White Ibis in the State (*Chat*, 27:65-66). Incidentally, Battery Island is featured in the May 1965 issue of *Wildlife in North Carolina.* The ten bird photographs by Joel Arrington include a superb color cover showing a Common Egret with young in the nest.

Wildlife Refuges Enlarged

The Migratory Bird Conservation Commission on 23 March approved the enlargement of four National Wildlife Refuges. The new acquisitions offer 7,017 additional acres of mixed open and wooded wetlands. Included are 1,022 additional acres to the Santee Wildlife Refuge of South Carolina. This refuge is used by approximately 40,000 Canada Geese and 80,000 ducks. Pat Ryan, Assistant Director, Division of Game and Boating, South Carolina, represented South Carolina at the meeting.

North Carolina Happenings

Recently the Wake County Board of Commissioners and the Raleigh City Council met in joint session. Foreseeing the possible convergence, due to population growth, of the cities of Raleigh, Durham, and Chapel Hill, they considered means of preserving "green areas" between the cities as a need in urban life.

A pine tree estimated to be 198 years old was felled recently in Vance County. It measured nine feet, eight inches in circumference and yielded a main log 75 feet long and three feet, four inches in diameter at the base. It was expected to produce 2,495 board feet of timber. What was the estimated commercial value of the timber cut from this patriarch of trees? Only $75!

Backyard Birding

Annie Rivers Faver
Department Editor

I have read of many cases of birds fighting their own reflections, but until this spring had no personal experience of this kind. On April 20, we saw a Song Sparrow, perched on the mimosa tree near the hall window, and facing the glass, sing his song and then fly at the window as if at another male, then back to the tree, where he hopped among the branches for about half a minute, and then repeated the performance. He always faced the window when singing, and never flew at the window without first singing his challenge to the rival male in the window glass. He continued this throughout the morning and our noon meal without any noticeable let-up, and we wondered when he found time to eat. Normally, Song Sparrows are rather shy, and though they come to our window feeders as well as to the outside feeders, if there is any movement on our part, they fly. But the instinct to challenge the window-glass Song Sparrow, a rival male, was so strong that the Song Sparrow did not mind four women and two men watching him and moving about only six feet from him in the hall. We were afraid that he would injure himself in some way, and finally soaped up the top of the window. He actually continued his attacks while the soaping was going on! When this was finished, the suspicious little songster flew from a branch on to the lower part of the frame, which he walked on for a little, trying to peer in to see if the other Song Sparrow was still there. Apparently satisfied that he was not, he flew back to the tree and sang his song, but now facing outward toward the trees and bushes, no longer looking at the window.—Margaret Sandburg, *Flat Rock, North Carolina.*

Rose-breasted Grosbeaks at Connemara Farm

This year the Rose-breasted Grosbeaks discovered our feeder for the first time. The first arrival, a lovely crimson-breasted male, came to it on April 23; but I had heard the warble a few days before while working in my garden, though I could not spot the singer. This male was evidently a scout, for the next day he brought three other males with him, and a female the day after. Before the week was up there were six males and three females there, all very wary of each other, some on perches outside the feeder from which they fed, the bolder birds inside. Sometimes they waited on the roof a little before entering, and we had our best view of them then.

I think these birds should be called Red-breasted Grosbeaks. None of those I have seen have breasts that could be termed even a dark rose. It is more like crimson. There is variety as to the amount of this color on the breasts. One, for instance, has only as much crimson as there is black above on the throat, while another has nearly twice this much, with a red stripe running down into the white underpart in the manner of the Red-bellied Woodpecker.

The female grosbeaks remind me of the female Purple Finches, and they are very interesting. One small female seems to think that she has to assert herself, and quarrels with those she thinks she can drive away, but often the result is that she has to leave. By way of contrast, another, a large one with a very placid temperament, concentrates on eating, never gets into a fight but dodges. Nothing ruffles her—she will even stay at the feeder when a Blue Jay intrudes and all the others leave. (We try to keep the jays away with chick feed at the stump where we feed the Bobwhites). One bright female found the window feeder, and two males followed her there. This was quite exciting to me, and more than I had hoped for, as I thought that they were too shy.

These crimson-breasted grosbeaks, in company with Cardinals and Blue Jays in the white blossoms of the dogwood make quite a picture. We are hoping that they will nest here and bring the young ones to the feeders as the Cardinals and many other birds do.—MARGARET SANDBURG.

Treetop Birding?

In our Backyard Birding throughout the years, we have learned to look for certain species at certain elevations: warblers, vireos, and orioles amid the leafy treetops; kingbirds and flycatchers on prominent perches; sparrows and finches on the ground. But the latter take to the treetops at certain times, just as the catkins appear on the oaks. In my own yard this spring I noticed a tree full of birds. Binoculars showed them to be White-throated Sparrows busily feeding among the green tassels at the ends of the branches.

While birding along the avenue to the Lanham Dairy in Lower Richland County, South Carolina, Mrs. Clyde Sisson of Columbia, Willett Mills of Halifax, Nova Scotia, and I noticed a queer bird feeding in the upper parts of a large oak. Checked point by point, it proved to be an immature White-crowned Sparrow, which is not at all common in our central part of our state. And it was most unexpected to find one so high in a tree. It seemed odd to be viewing from underneath a bird usually identified by markings on the head, back, and wings. Mr. Mills is a member of the Nova Scotia Bird Society and quite familiar with the bird in the north.—*Dept. Ed.*

Are Blackbirds a Menace?

"Are blackbirds becoming a dangerous enemy of mankind?" asked Willard Neal, in a recent issue of the Magazine of the Atlanta *Journal* and the Atlanta *Constitution.* Mr. Neal goes on to say that the redwings, starlings, grackles and cowbirds have become fantastically numerous in some sections of Georgia and appear to be turning against their unfeathered friends.

Specialists of the Fish and Wildlife Research Station at Gainesville, Georgia, have checked on huge flocks of blackbirds in Florida and Georgia, and have determined that the birds are carrying some diseases that are fatal to man and to animals. They also spread parasites among poultry and do great damage to certain farm crops. They literally "gobble up" all the natural food in large areas, thus leaving none for more desirable birds, such as the bobwhites and the song birds.

All blackbirds in various localities gather to roost in large colonies. Eleven such roosts are known, where the birds gather by the millions. Eight are in Florida. In Georgia there is the one at Milledgeville, one near Dublin and another near Moody Air Force Base at Valdosta. In the

(Continued on Page 60)

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

American Flamingo at the Pea Island Refuge.—On 12 December 1964, C. C. Steirly of Waverly, Virginia, G. M. Cornell of Driver, Virginia, and the writer found an American Flamingo *(Phoenicopterus ruber)* in the National Wildlife Refuge at Pea Island, North Carolina. The bird was in the pond on the north side of the dike on which an observation platform is located. We watched it for some time with a 30X Balscope and later approached fairly close by going out on the marsh. The flamingo was a bright pink—excellent color—and feeding vigorously in water apparently 12 to 18 inches deep. The weather was unusually warm for December, cloudy and a bit foggy. We observed the bird for some 30 minutes, around noon.

We returned to the refuge 14 December and again found the flamingo in the same general area. The weather that day was cold and very windy. We were quite some distance away but could easily see the bird with Balscope and binoculars. We observed it for some 10 minutes and then, for no apparent reason, it left the water, rose high in the air and finally faded from sight in a southerly direction.

Incidentally, a flamingo, presumably this same bird, was seen in the same pond on 5 and 7 December by F. C. Richardson of Baldwinsville, New York and Norfolk, Virginia, and Stuart Hosler of Baldwinsville. In fact, they told us to look for it. I have on several occasions seen captive flamingos in Florida but never before had I seen one that could be considered wild.—JAMES EDWARD AMES JR., *Driver, Virginia, 18 December 1964.* [The inclusion of the American Flamingo in the North Carolina State List is based upon the single observation of two individuals on Pea Island, 23 June 1937 (*Chat,* 1:61 and 2:72). That record is credited in the current *AOU Check-list.—Dept. Ed.*]

Whistling Swan at Barnwell, South Carolina.—On 8 December 1964, George H. Bostwick and I drove through Barnwell, South Carolina along Hwy 28, which passes the Edgar J. Brown Lake, within the city limits. We noticed two large white birds in the middle of the lake, but we did not have time to stop. They were not on the lake the day before when we stopped there to look at some ducks.

On 19 December, Elizabeth Dexter and I were in Barnwell and found the birds still present and saw that they were adult Whistling Swans. They held their necks straight. Their black bills were conspicuous. They kept to the middle of the lake, ducking often for food. Shooting and motorboating are forbidden on the lake and the birds seemed to be at ease. The water is shallow and the food plentiful. There were about 100 American Widgeon feeding with the swans.

On 24 December Thomas Rial saw the swans at Barnwell. He estimated the number of widgeon present then to be 300.

It appears that the Whistling Swan has never before been reported from Barnwell County. Murphey *(Observations on the Bird Life of the Middle Savannah Valley,* 1937) records a single bird taken near Augusta in 1911. In recent years a few individuals have been seen nearer the coast in Colleton and Jasper counties, South Carolina.—WILLIAM POST JR., *Aiken, South Carolina, 28 January 1965.*

Common Eider at Morehead City—A Footnote.—The March 1965 *Chat,* p. 25, records my observation of a Common Eider at Fort Macon, Morehead City, North Carolina, on 19 December 1964. I took the bird to be a female.

Apparently the same bird was present five weeks later when CBC met at Morehead City, and among those who saw it then (23 January), Lee Jones watched it through a Questar and expressed his opinion that it was a young male. In good light he found, among other indicators, a few white feathers on the back. These facts are also recorded in the March *Chat.*

Ten weeks later, on 3 April, I again saw this eider. The back was about half white and it obviously was an immature male. Lee Jones is to be commended for his keen and thorough observation.—ROBERT P. HOLMES III, *306 Country Club Drive, New Bern, North Carolina, 11 April 1965.*

Golden Eagle Captured in Mitchell County, North Carolina.—Near the end of January or the first of February 1964, an immature Golden Eagle *(Aquila chrysaetos)* was captured on Roan Mountain near Bakersville, in Mitchell County, North Carolina, by a resident of that area, Herbert Gouge Jr. Mr. Gouge lives just off Route 261 on Little Rock Creek Road.

It was several months until ornithologists in the area learned that the bird had been captured and was being kept in captivity by Mr. Gouge. Lee R. Herndon, editor of *The Migrant,* and Kenneth Clark were first to see the eagle; and later George Craig, Ken Dubke, and the writer visited the Gouges. The identification was confirmed and the bird was judged to be an immature.

Mr. Gouge claimed to have caught the eagle in a trap he set on the mountain behind his home. The area was covered with deep snow on the day the eagle was taken, and Gouge removed part of his clothing to throw over the eagle to pin it to the ground so it could be removed from the trap. It had been caught by one toe and was uninjured. He explained to the writer and others, on 7 June, that his ewes lambed earlier than usual during 1964 and that he had seen two Golden Eagles and one Bald Eagle *(Haliaeetus leucocephalus)* on the mountain at the same time and had observed eagles catching his lambs. He has been raising sheep for about 20 years and has constantly had trouble with eagles during the spring months when his ewes lambed. He said that, during past years, he has seen eagles on the mountain in fall around October and November.

Mr. Gouge decided to release the eagle and on 28 June the writer, visitors, and several members of the Tennesse Ornithological Society gathered at Gouge's home. A U. S. Fish and Wildlife Service band, #509-53346, was placed on the eagle by this writer, and the bird was measured. Gouge claimed to have measured the wing span on a previous date finding it to be 84 inches. Other measurements taken at the time of banding were: wing, 24.25 inches; tail, 15.00 inches; tarsus, 5.00 inches; and bill, 1.75 inches. The bird was released and to the best of my knowledge has not been seen since.

In consideration of the extreme measurements of the wing, tail and possibly the tarsus of this specimen, it seems reasonable to consider the sex as female. A comparison of measurements to those given by Ridgway, *Birds of Middle and North America, Part XI, U. S. Nat. Mus. Bul. 50*, Friedmann, 1950, p. 456, points to such a conclusion. The measurements listed in that reference are given here with those of the Roan Mountain specimen converted to millimeters and listed in parentheses: wing, adult male, 555-610, adult female, 620-666 (616); tail, adult male, 320-360, adult female, 350-390 (381); tarsus, adult male, 101-122, adult female, 103-123 (127). The writer recalls difficulty in taking the measurement of the tarsus and such an extreme might be in error. However, Ridgway notes one specimen (male) that had a measurement of 130 mm.

Dr. Herndon identified an immature Golden Eagle at the summit of Hump Mountain at the Tennessee-North Carolina line, near Roan Mountain, 10 October 1948 (*Migrant*, 20:17). In the revised edition of *Birds of North Carolina* (1959), there are two Western North Carolina records. Sherman and Eli Potter identified one early in May, 1919, in Graham County, and Murray saw one at Blowing Rock in Watauga County, 16 August 1928.

B. R. Chamberlain provided these additional records: an immature bird at Hanging Rock (Wilkes County) 25 October 1958 by James Mattocks (*Chat*, 23:35); an immature captured at Jefferson (Ashe County) 18 or 19 November 1960 and reported by Mrs. A. B. Hurt (*Chat*, 25:15); an adult "found dead" in the Crabtree section of Haywood County about mid-March 1962, reported by Norme Frost (*Chat*, 26:81).

For additional information, the reader is referred to *The Migrant*, Vol. 35, No. 3, pages 57 to 59. The frontispiece is a photograph of this bird and the article (by Kenneth H. Dubke) contains additional information. The writer is grateful to Mr. Dubke for permission to borrow facts from that paper without direct reference.—JOHN WALLACE COFFEY—*508 Spruce Street, Bristol, Tennessee 37622, 13 April 1965.*

Another Inland Record of the American Golden Plover in North Carolina.—The occurrence of the American Golden Plover *(Pluvialis dominica)* on the coast of North Carolina is not too uncommon. However, there are relatively few records for this species inland. The first record for the State away from the coast was a specimen taken by William Primrose at Raleigh in the fall of 1884 (Pearson, Brimley, and Brimley, 1942, *Birds of North Carolina*). F. H. Craighill observed 8 birds at Rocky Mount from 11 through 18 September 1934, and a single bird in the same locality on 8 October 1935; Randolph Butler reported another sighting from the Rocky Mount area during September 1937 (Pearson, Brimley, and Brimley, ibid.). On 31 October 1943, Roxie Collie Simpson and others studied at some length a bird on the shore of Lake Johnson in Wake County (*Chat*, 7:80). J. W. E. Joyner, on 26 October 1958, noted a bird at Old Town Farm near Rocky Mount, and another or the same individual at that location on 16 November 1958 (*Chat*, 23:20). Perhaps one of the most remarkable inland records was that following the passage of a hurricane, when Wendell P. Smith counted 21 individuals near the airport at North Wilkesboro on 2 October 1959 (*Chat*, 24:24 and 25:46).

R. J. Hader and the writer studied an American Golden Plover for 20 minutes in a pasture at Greenview Farms in Wake County on 3 April 1965. The white stripe on the side of the head and the neck was the only evidence of spring molt. Other than this, the plumage was as that of the fall and winter. The plover was with a flock of 7 Killdeer and a number of Common Snipe, all of which were in the midst of a herd of dairy cattle. Upon approach, the plover would fly several hundred feet before again alighting in the pasture. In flight, the absence of a white stripe in the wings, the absence of white at the base of the tail, and the unmarked axillars were carefully noted. The whistle-like call was heard on several occasions.

Two cold fronts passed through the Wake County region in the four days prior to 3 April. The first system passed on 30 March, coming from the northwest. Winds on this date were NW 3 to 7 knots. The second frontal system passed through the region on 2 April from the north. Winds on this date were SW 8 to 12 knots. Thus, conditions were favorable for the plover to have drifted east of its normal spring migration route up the Mississippi Valley. Of the inland records for the American Golden Plover in North Carolina, this is the first for the spring.—PAUL W. SYKES JR., *Department of Zoology, North Carolina State University at Raleigh, Raleigh, North Carolina, 15 April 1965.*

American Woodcock Abundant in Aiken County, South Carolina.—The American Woodcock *(Philohela minor)* may be considered abundant this winter (1964-1965) on the AEC Savannah River Plant Area in Aiken and Barnwell Counties, South Carolina, and adjoining land managed by the International Paper Company in Aiken County. The nuptial song of the male was heard as early as mid-January, and by early February it was possible to observe the courtship antics of as many as 12 to 15 birds during a short walk at twilight as they abandoned the normal screen of thickets to perform over the marshy fields. Also, local hunters report seeing more woodcock this year than previously.

Norris (*Birds of the AEC Savannah River Plant Area, Charleston Museum Contribution No. 14,* 1963) records the American Woodcock as rare, a car-smashed specimen collected on 23 September 1955 being the only individual found. His study includes observations from 1955 to the fall of 1962. This research was conducted under grant MS-12.—JOSEPH R. FATORA, *School of Forestry, The University of Georgia, Athens, Georgia, 25 February 1965.*

Horned Lark Eggs Collected in South Carolina.—The Horned Lark *(Eremophila alpestris)* has been known as a breeding bird in Greenville County, South Carolina since 1951 (*Chat,* 15:80, 1951); but though numerous nests have been found since that time, no set of eggs had been collected and preserved. This note is written to record the collecting of a nest with three eggs found on the campus of the Wade Hampton High School, just outside of the city of Greenville on 3 April 1965. The eggs were sent to Ernest Cutts for the Charleston Museum collection. In his opinion, two of them had been incubated for about two days and the third was infertile.

Two races of the Horned Lark winter in upper South Carolina and in recent years, one of them, *E. a. praticola,* has extended its breeding range through Virginia and North Carolina into Piedmont South Carolina, where it was first found nesting at Columbia in 1950 (*Audubon Field Notes,* 4(5):270, 1950) by Kay Sisson and J. H. Fowler. This race, commonly called the Prairie Horned Lark may now be considered a fairly common breeding bird where suitable habitat is available in Piedmont South Carolina. It has been found nesting at airports and at schools which have a campus area of 10 acres or so. It is known to nest in peach orchards in upper Spartanburg County (per Mrs. Edgar Woodfin of Campobello). It has not been taken below the Fall Line in South Carolina in any season. The "Northern" race *(E. a. alpestris)* is represented by specimens collected in the upper and lower regions of the State, but only during the winter months (*South Carolina Bird Life,* Sprunt and Chamberlain, 1949).—JAMES B. SHULER, *43 Kirkwood Lane, Greenville, South Carolina, 10 April 1965.*

Yellow-headed Blackbird at Aiken, South Carolina.—An adult male Yellow-headed Blackbird *(Xanthocephalus xanthocephalus)* was a visitor in a fenced-in stable yard area at the eastern edge of Aiken, South Carolina regularly between 11 and 22 March 1965. The bird fed on sweet horse feed that was wasted (cracked corn, other grain, and supplements). With it were scores of Brown-headed Cowbirds, an occasional Red-winged Blackbird and Common Grackle, plus the usual complement of Field, Chipping, House, and White-throated Sparrows. Temperatures during the period of the visit varied from 23 F to 75 F and the rainfall was greatly above normal.

I made no attempt to collect the bird, but I have sent two color slides to the Charleston Museum for their records. *South Carolina Bird Life* (Sprunt and Chamberlain, 1949) gives but two occurrences of the Yellow-headed Blackbird in the State: a trapped bird examined by Loomis in Chester County in 1884, and a bird seen by Job at the lower edge of Charleston County in 1926. *Chat,* (25:41, 1961) notes a second Charleston County observation, in 1961. The present record appears to be but the fourth for the species for the State.—JOHN B. HATCHER, *Forest Manager, AEC, P. O. Box A, Aiken South Carolina, 26 March 1965.*

Grackle and Sparrow Hawk Teamwork.—Although I have often noted many birds attacking hawks and crows in defense of nesting territories, I had not seen a bird working *with* a hawk for territorial defense before 2 July 1964. On that day a little after 1:00 PM I heard a Red-tailed Hawk *(Buteo jamaicensis)* calling in the Cullowhee Valley, Jackson County, North Carolina. Soon after, the Red-tailed Hawk left a perch on the ridge above me, followed closely by a Common Grackle *(Quiscalus quiscula)* and a Sparrow Hawk *(Falco sparverius).* The attacking birds were making alternate runs on the Red-tailed Hawk. With great precision, one bird would fly at the large hawk, attack for several seconds, and veer away, allowing the other attacker (by then in the middle of another run) opportunity for harassment. When the birds were immediately overhead, the Sparrow Hawk saw me and flew back to the ridge the birds had come from, but the grackle continued the attack for another 200 yards.—RICHARD H. PEAKE JR., *Box 163, Cullowhee, North Carolina, 11 January 1965.*

Common Redpoll Seen in Barnwell County, South Carolina.—On 26 January 1965 we saw a strange small bird at our bread-tray feeder some 30 feet from the dining room of our home in Williston, Barnwell County, South Carolina. The tray contained commercial wild bird food (mostly millet and sunflower seed) and quite a bit of stale bread crumbs. The bird was feeding with our usual Cardinals and Slate-colored Juncos. After a leisurely meal it flew to the top of a Live Oak about 50 feet away and preened its feathers. There was good sunlight on it during this episode—quite helpful to us as we sat with our bird books and 7x35 binoculars working out the identification of the newcomer. After about 20 minutes it left us, but we had ample time to check the markings against the pictures and descriptions in Peterson's and Reed's field guides and the new National Geographic Society's *Song and Garden Birds of North America.*

The most eye-catching feature was the rosy pink breast. A red cap and a black chin spot satisfied us that we were looking at our first male Common Redpoll *(Acanthis flammea).*

The day was an ordinary, sunny January day; but the week before had been quite cold, windy, with some sleet due to a cold front moving through the area.

Since the Redpoll is almost unheard of in South Carolina we told some of our Charleston friends about it. Later we saw B. R. Chamberlain and related our experience in detail. This report is made at his suggestion.—CAMPBELL C. FREEMAN and DOROTHY D. FREEMAN, *P. O. Box 436, Williston, South Carolina, 11 April 1965.*

Oregon Junco at Statesville, North Carolina.—On the afternoon of 15 January 1965, I was studying a score or more of Slate-colored Juncos and White-throated Sparrows around the feeders at my home in Statesville, North Carolina. It was an extremely cold day and a storm appeared to be brewing. At about 4:00 PM I saw a bird fly into a Silver Maple some 15 yards away, and after a brief pause there it flew to a suspended feeder near me and began eating. It was obviously a junco but the coloration excited me, and I watched it closely for more than an hour that afternoon and during most of the following day when 15 inches of snow came to Statesville. I did not find it again after that, but I had watched it at extremely close range from every angle and every lighting situation. After a careful check with the Peterson field guides, I have every reason to believe it was an Oregon Junco *(Junco oreganus)*.

The back of this bird was dull brown; the hood was a light, clear gray; the bill was pinkish. The sides were a warm buff-tan, contrasting sharply at the junction with the hood. The legs were light in color.

In comparison with the immature Slate-colored Junco *(Junco hyemalis)*, which often has tan sides, the side coloring of *J. hyemalis* gently suffuses into the hood. This makes it a little difficult to separate the two species from a front view. Seen from the back there is no mistaking them.

Occasionally this bird fed at the suspended feeder, and twice it came to my window feeder, preferring cracked corn and millet to the larger seeds. At times I heard it utter a series of twittering notes as it flew.

Since the bird was not collected, speculation as to the race would be of little value. It is noteworthy, however, that the *AOU Check-list* of 1957 names eight races of the Oregon Junco and mentions only one of them—*J. o. montanus*—as having been found in the East.

Two other CBC members, Irving Shafer and Mrs. Allen Knight, observed this bird with me on 15 January.

Apparently there are but two published records of the Oregon Junco in North Carolina: a sight record by George A. Smith at Greensboro 15 January 1948 (*Chat*, 12:52, 1948); a specimen taken at Zebulon, 3 March 1960 by Jack Potter and deposited at the State Museum (*Chat*, 24:27-28, 1960). —RONNIE UNDERWOOD, *820 Meadow Road, Statesville, North Carolina, 18 January 1965.* [An additional North Carolina sight record comes from Jackson County where Richard H. Peake Jr. observed an Oregon Junco during the Christmas Bird Count, 30 December 1964 (*Chat*, 29:20, 1965). —*Dept. Ed.*]

Gambel's White-crowned Sparrow Trapped at Spartanburg, South Carolina.—On 14 December 1964, while trapping White-crowned Sparrows *(Zonotrichia leucophrys)* I noticed an unbanded bird that appeared slightly different. It was an adult Gambel's Sparrow *(Z. l. gambeli)* in excellent plumage. The presence of several adult White-crowns in adjoining traps made the comparison and identification easy.

The lores of the Gambel's were grayish white, giving the appearance of the white stripe over the eye, beginning at the base of the upper mandible. The bill was pinkish, differentiating it from the subspecies *Z. l. nuttalli*, which has the eye stripe starting at the upper mandible also, but the bill is yellowish. The chord of this bird (bend of wing to tip of longest primary) measured 76 mm, indicating it to be a female when using the method of Dr. James Cope, who has made extensive studies in sexing this species by chord measurements (Parker, *Inland Bird Banding Association News*, 37(1):16-17, 1964).

It is interesting to note that of the four times (14 and 16 December, 1 January, and 4 April) the Gambel's has been trapped, another White-crowned Sparrow has been retrapped at the same time, this bird having a chord measurement of 82 mm and indicating it to be a male. Among other adults that were retrapped, this pattern of close association between two birds has frequently been present. These findings add support to a true personal attachment of mates in this species, the pairs associating closely throughout the year. Blanchard's study of the subspecies *Z. l. nuttalli* in 1936 (*Condor*, 38:145-150) found this to be true in a number of cases.—JOHN O. WATKINS, *359 Pine Street, Spartanburg, South Carolina, 14 April 1965.*

Lapland Longspur Again Seen on Outer Banks.—In my report of a visit to the North Carolina Outer Banks last November (1964), I described our sighting of two Lapland Longspurs at the Wright Brothers Monument grounds (*Chat*, 29:29, 1965). I checked the grounds repeatedly during a return visit this spring but found only a few Savannah Sparrows and a mixed flock of icterids.

On the morning of 27 March (1965) I was driving south on Route 12 to Oregon Inlet and, when about 2 miles south of the Manteo road, I spotted a small flock of birds feeding in the grass beside the road. They flushed when I slowed down and went but a short distance; so I stopped and stalked them to within a road's width. I found several Savannah and Song Sparrows, five Slate-colored Juncos, and a Chipping Sparrow. One other bird finally moved out into view, and I realized it was a Lapland Longspur. I had a perfect, close view of the bird in full profile and could check out the face and breast pattern. It crept through the grass feeding in company with the other birds. It seemed "uneasy" and soon it flew up, banking into the wind with its tail fanned, showing the pattern and clinching the identification.—CARL W. CARLSON, *5706 Lone Oak Drive, Bethesda, Maryland, 30 March 1965.*

BRIEFS FOR THE FILES

Cattle Egret, 4 in pasture with cows near Holly Hill, Orangeburg County, S. C., 28 March, James B. Shuler; 7 on Edisto Island, S. C., 2 April, Fred May. • **Glossy Ibis**, 1, west of the Ashley River at Charleston, S. C., 17 March, David Chamberlain. • **Fulvous Tree Duck**, about 50 in a small pond on Edisto Island, S. C., 10 through 13 March, Fred and Mary May; 15 in the grasses at a pond edge at Cape Hatteras, N. C., 19 February, Carl W. Carlson. • **Shoveler**, an immature male at Lake Johnson, Raleigh, N. C., 5 through 12 September 1964, R. J. Hader; 2 at same site, 28 March, Lee Jones. • **Redhead**, 3 or 4 on Lake Wheeler, Raleigh, N. C., 13 February through 7 March, R. J. Hader; 28 counted on small lake near Statesville, N. C., 7 March, Chip Shafer and Ronnie Underwood. • **Common Goldeneye**, 1, Fayetteville, N. C., 13 March, Lee Jones.

Swallow-tailed Kite, arrived this spring at Santee delta area (S. C.), 18 March (1964 arrival date, 17 March), Robert Gooding. • **Mississippi Kite**, 1 immature at Murrell's Inlet, S. C., 17 October 1964, Robert P. Holmes III. • **Bald Eagle**, 1 immature over New River, Ashe County, N. C., 26 March, Mrs. A. B. Hurt; 2 young near full size in nest attended by both adults, 14 March, Middleburg Plantation, Charleston County S. C., B. R. Chamberlain, et al.

Semipalmated Plover, 2 to 4 at Lake Johnson, Wake Co., N. C., seen frequently between 20 August and 12 September 1964, R. J. Hader. • **American Woodcock**, apparently very common around Raleigh, N. C., this winter, R. J. Hader. • **Common Snipe**, 1 at Raleigh, 12 September 1964, rather early, R. J. Hader. • **Greater Yellowlegs**, 1 to 3 at Lake Johnson, Wake County, N. C,. from 26 August through 20 September 1964, R. J. Hader. • **Dowitcher** (sp.), 1 at Lake Johnson, Wake County, N. C., 26 August, 4, 5, 7 & 12 September 1964, R. J. Hader; 10 in the area around Nags Head, N. C., 25-28 March, Carl W. Carlson. • **American Avocet**, 2, apparently the first in Wake County, N. C., at Lake Johnson, 26 August 1964, R. J.

Hader. • **Short-eared Owl**, 2, probably different individuals, in the Pea Island area, N. C., 26 March, Carl W. Carlson.

Chuck-will's-widow, 2 calling, Wadmalaw Island, S. C., 8 April, B. R. Chamberlain. • **Western Kingbird**, 2 or more, Ashe County, N. C., 24 March, Mrs. A. B. Hurt. • **Purple Martin**, 1 or more near Santee River, Charleston County, S. C., 27 February, Peter Manigault. • **House Wren**, first arrival noted 9 April at Zebulon, N. C., Eloise F. Potter. • **Bewick's Wren**, 1 at Raleigh feeder twice on 30 January, tail pattern carefully checked, Mike Browne. • **Mockingbird**, 1, flashing wings to half height 12 times at 3:15 PM, 25 November 1964, Eloise F. Potter. • **Cedar Waxwing**, 7, the first in several years at Crumpler, Ashe Co., N. C., 27 February, Mrs. A. B. Hurt.

Orange-crowned Warbler, 1 near Beaufort, N. C., 23 January, Lee Jones. • **Yellowthroat**, 1 at Raleigh, N. C., 22 December 1964, possibly a first at mid-winter for the area, R. J. Hader. • **Yellow-breasted Chat**, 1 in yard at Spartanburg, S. C., 14 and 24 December 1964, John O. Watkins. • **Evening Grosbeak**, 3 males, 2 females at feeder at Crumpler, Ashe Co., N. C., 17 March, Mrs. A. B. Hurt. • **Purple Finch**, 1 male at Hickory, N. C., 12 November 1964, C. G. Hughes; about 100 at High Rock Lake, Rowan County, N. C., 14 November 1964, Ronnie Underwood. • **Grasshopper Sparrow**, 1 near Beaufort, N. C., 23 January, Lee Jones. • **Lark Sparrow**, 1 watched in yard at Crumpler, N. C., 1 November 1964, Mrs. A. B. Hurt. • **White-crowned Sparrow**, 1 singing in yard at Tarboro, N. C., 9 February, E. H. Marrow.—*All dates 1965 unless noted otherwise.* Compiled by B. R. CHAMBERLAIN.

THE RING

A permanent exchange was recently initiated between *Chat* and *The Ring*, which is edited by Dr. W. Rydzewski of the Laboratory of Ornithology at Wroclaw, Poland. *The Ring* is an international, English language, quarterly bulletin devoted chiefly to bird banding and bird migration studies; however, articles have appeared on marking for identification such varied animals as shrimp, alligators, bats, and butterflies. Although designed to keep banders up to date on methods, projects, and recent literature, *The Ring* (Series A) contains much information of interest to all bird students.

On the tenth anniversary of *The Ring* in October 1964, Dr. Charles H. Blake, one of the 43 original subscribers, congratulated Dr. Rydzewski for having produced a journal "which has not overlapped other journals and reports dealing with bird banding." He continued, "Birds do not respect national boundaries and we should have some understanding of methods and activities of other countries. *The Ring* has been most useful in this regard."

The Ring (Series B) is the International Ornithological Information Service, and it was established to offer birders a means of exchanging news quickly. More general in scope than *The Ring* (Series A), the I.O.I.S. deals with such areas of bird study as clubs, museums, legislation, publications, aviculture, expeditions, new birds described, personal items, grants offered, and requests for information.

Subscription price for *The Ring* (Series A) is $1.50 per year. Series B of *The Ring*/I.O.I.S. is $1.50 for each four issues, with the first two issues being sent free upon request. Orders (accompanied by check) may be placed through RUCH, Wilcza 46, Warsaw, Poland, or European Publishers Representatives Inc., 132 West 43rd Street, New York 36, N. Y.—*Ed.*

BOOK REVIEWS

The Bird Watcher's America. Olin Sewall Pettingill Jr., editor. Illustrated by John Henry Dick. McGraw-Hill Book Company, New York, N. Y. 1965. 441 p. Index. $7.50.

There's hardly a bird watcher worthy of the name who will not discuss —at the drop of a road map—his plans to visit some choice birding spot in hopes of adding certain species to his life list. He is likely to quote Pettingill's guides to bird finding or one of his recent articles in *Audubon Magazine.* And from now on, he will quote *The Bird Watcher's America.* In this book 44 outstanding naturalists describe their own particular areas as the bird student sees them. Among the contributors are Allan D. Cruickshank (Down East in Maine), Alexander Sprunt Jr. (Bull's Island, South Carolina), Arthur Stupka (Great Smoky Mountains National Park), Roger Tory Peterson (Pribilofs), Olaus J. Murie (Arctic Alaska), Joseph James Murray (Great Dismal Swamp), Ira N. Gabrielson (Malheur and Klamath Lakes), George Misch Sutton (Black Mesa Country of Oklahoma), Robert Porter Allen (Florida Keys), and Harold Mayfield (Kirtland's Warbler Country).

Editor Pettingill wisely gave his contributors great freedom in presenting their material. Some chose to add bits of history, personal anecdotes, and details about animals other than birds, all of which enhance the descriptions of habitats and the birds peculiar to them. On the whole reading this book is like having all too brief conversations with 44 enthusiastic and knowledgeable naturalists who are equally quick with biological facts and the right descriptive words and phrases.—EFP

Life Histories of North American Birds. Arthur Cleveland Bent. Bulletins of the U. S. National Museum. Reprinted by and available from Dover Publications, Inc., 180 Varick Street, New York, N. Y. Paperback. Index. Plates.

Nuthatches, Wrens, Thrashers and Their Allies. 475 p. $2.75.
Thrushes, Kinglets and Their Allies. 452 p. $2.75.
Blackbirds, Orioles, Tanagers and Their Allies. 549 p. $2.75.
American Wagtails, Shrikes Vireos and Their Allies. 411 p. $2.75.

With the publication of the above four volumes, Dover completes the paperback republication of Bent's 17-volume *Life Histories of North American Birds,* originally issued under the auspices of the Smithsonian Institution. One final volume on finches is still in preparation at the Smithsonian, where a committee undertook the completion of Bent's work following his death. It is hoped that the finch volume will continue the Bent tradition of combining scientific data and pleasurable reading for all bird students. I suggest that anyone who wants to sample Bent's work would do well to read his account of that "impudent and aggressive little pest," the "resourceful English sparrow," (Bulletin 211, Blackbirds, Orioles, Tanagers, and Allies). While noting this bully's many bad habits, Bent does not fail to mention the bird's redeeming features including a voice which at least "expresses cheerfulness under adverse weather conditions."—Eloise Potter

BACKYARD BIRDING

(Continued from Page 50)

1965 census, Dr. Harold Jones, biologist at Georgia Woman's College, estimated that six million birds spent the winter nights in the canebrake on Judge Erwin Sibley's farm, five miles southeast of Milledgeville on Georgia Highway 112. Many visitors come to the Judge's home before dawn for the experience of seeing the birds wake up and fly out to feed. The description of their feeding in the pasture of the State Hospital farm was given thus: "We stopped to watch several acres of blackbirds rolling over the pasture. The large flock really rolled, like the caterpillar tread of a bulldozer. Those at the back, having cleaned up all the seed in the square yard or so allotted each bird, flew over the top and landed in front. The blanket of birds was so extensive that the movement was continuous. They appeared to be getting every seed and tidbit available."

Out of this huge flock, birds were captured in nets and checked for the diseases and parasites, which they were found to be carrying. We in the Carolinas have large roosts of blackbirds too. We knew of one near Clemson that was said to run into the trillions. Another large one is across the river from my home, between Wedgefield and Poinsette State Park. I am just as sure that they may also be found to the north and south of us.

What can be done to control these birds? What do our readers think would be a workable solution? Please let me have your ideas.—*Dept. Ed.*

Carolina Bird Club
INC.

Founded 6 March 1937 *Incorporated 8 August 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Sustaining, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of The Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat.* Subscription price to non-members is $1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to the *Distribution Office*: N. C. State Museum, Box 2281, Raleigh, N. C. Please notify the Distribution Office immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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Vol. 29, No. 3 Sept. 1965

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The Chat

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Vol. 29 September 1965 No. 3

EDITOR .... Eloise F. Potter, Box 487, Zebulon, N. C.
GENERAL FIELD NOTES ... B. R. Chamberlain, Rt. 1, Wadmalaw Isand, S. C.
BACKYARD BIRDING .... Annie R. Faver, Rt. 2, Eastover, S. C.
CONSERVATION .... Gladys Buckner, 500 West Ave., N. Augusta, S. C.
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Cover Photo—Great Horned Owl photographed by James F. Parnell.

PRESIDENT'S PAGE

On the President's Page of the June 1965 issue of *Chat,* it was reported that a Resolution, concerning the retention of the Smith Island complex at the mouth of the Cape Fear River, N. C., as a Wildlife Preserve, was unanimously passed, and that your President would write letters to key individuals expressing the moral backing of the CBC for such a project. I sent letters to the Secretary of the Interior, Stewart L. Udall, to the Governor of North Carolina, Dan K. Moore, and to the owner of Smith Island, Frank O. Sherrill. It is interesting to note the kind of responses received which are printed below:

"Dear Colonel Frost: Thank you for your letter of May 31 enclosing a resolution of the Carolina Bird Club pertaining to Smith Island, North Carolina. The Club goes on record as supporting a public park on the Island and discouraging the State of North Carolina from building a road or operating a ferry to it. The National Park Service in its 1955 Seashore Recreation Area Survey of the Atlantic and Gulf Coasts, described Smith Island as having excellent qualifications for public seashore recreation purposes. The Service is now exploring the possibility of making an up-to-date field investigation of Smith Island which might lead to a report on its present potential for recreation and wildlife preserve purposes. Please convey my appreciation to the Carolina Bird Club for their interest in keeping Smith Island in its natural state. Sincerely yours, (signed) Stewart L. Udall."

"Dear Colonel Frost: Thank you for your recent letter and the enclosed resolution concerning Smith Island. I appreciate having your views on the potential of this Island as a public park to insure its being retained in its present state. I have given some study to this matter. However, as you know, Smith Island is now owned by a private individual, and the State at the present time has no say-so in its preservation or development. With best wishes, I am - Sincerely yours, (signed) Dan Moore (Governor, North Carolina)."

No answer has been received from the owner of the Island, which is understood.

The general subject of "Conservation of our Natural Resources" is a vital one, and our club, definitely, should not minimize its attention, nor its work, in its efforts to educate our citizens, publicize the issues, practice what it preaches, and give every ounce of moral support and financial aid possible to the cause. Without sufficient conservation of the remaining land, marsh, and coastal areas, there will, eventually, be few birds to observe.

* * * * *

Changing the subject, you can expect an early report on the locations and tentative dates for the 1965-1966 Field Trips for your planning purposes. Render your club a good service and attend as many meetings as possible. If you cannot come to a meeting, charge yourself a self-imposed penalty and buy a gift membership for some worthy young person.

NORME D. FROST, *President*

The Chat is published quarterly (March, June, September, and December) by the Carolina Bird Club, Inc., with headquarters at the North Carolina State Museum, 102 N. Salisbury Street, Raleigh, N. C. 27602. Entered as second class postage paid at Raleigh, N. C. 27602.

NEWS AND COMMENTS

Nest Card Program

The North American Nest Card Program sponsored by the Cornell Laboratory of Ornithology is winding up the 1965 nesting season, and many cards have already been returned. There are still many cards in the hands of the individual recorders, however, and these should be returned as quickly as they are completed. The Laboratory staff is preparing data for transferral onto IBM cards, and a large bulk of material is needed for the first run, to be started soon.

In order to complete local records, observers in North and South Carolina should send completed cards to the Regional Center, Dr. James F. Parnell, Department of Biology, Wilmington College, Wilmington, N. C.

Color-banded Cattle Egrets

Due to the widespread interest and lack of knowledge surrounding the Cattle Egret, T. A. Beckett III and his co-workers have banded nearly 2,000 birds of this species. During the 1965 nesting season 1,000 nestling Cattle Egrets were color banded within a 15-mile radius of Charleston, S. C. These birds have a red band on the left leg and an aluminum government band on the right tarsus. Mr. Beckett requests that all observers report sightings of these birds to him at Magnolia Gardens, Johns Island, S. C.

Mr. Beckett explains that past recoveries have shown Cattle Egrets to be great wanderers and colonizers of new areas. He fully expects the birds banded at Charleston to spread from Canada to South America, and from Mexico into California. He also hopes that sightings of color-banded Cattle Egrets will establish a definite age for breeding in this species.

Heron Dispersal Study

Dr. Andrew J. Meyerriecks, Department of Zoology, University of South Florida, Tampa, Florida, is currently studying the movements of young herons in Florida. His work is being done in cooperation with the Encephalitis Research Center of Tampa, a division of the State Board of Health. All of the herons and egrets found in the United States breed in Florida and occur in goodly numbers. A fascinating aspect of the life history of herons is that the young ones, newly fledged, engage in dramatic dispersal movements. Strangely enough, detailed information is lacking on the movements of these young herons in Florida and nearby states.

Dr. Meyerriecks is banding each young heron with a standard government aluminum band placed on its right leg, and then the bird has some of its feathers dyed a bright color. Each heronry is assigned a special color code so that observers can tell where the young heron was born. If you see a strangely marked heron or egret of any kind, please send this information to the address below: DATE, PLACE, SPECIES OF HERON (if known), HOW BIRD WAS COLORED (for example, on the right wing only, left wing only, belly, both wings, and so on). Please give us your name and address so that we may tell you where your heron came from. Your help will be greatly appreciated and will contribute to the success of this project.—HERON PROJECT, Encephalitis Research Center, 4001 Tampa Bay Boulevard, Tampa, Florida 33614.

Bull's Island Tours

During the fall and winter of 1964-1965, chartered tours of Bull's Island National Wildlife Refuge were scheduled several days each week departing from the Municipal Yacht Basin at Charleston, S. C., at 8 AM and returning about 5 PM. Guiding these tours was either Alexander Sprunt Jr. or the Francis Barringtons. Since the wildlife tours were well received, plans are underway to resume the program this fall. Anyone interested in participating may obtain a free brochure by writing Romaine Murray of Charleston Marine Charters, Municipal Yacht Basin, Charleston, S. C. Reservations must be made in advance.

Christmas Bird Count Dates

Dates for the Christmas Bird Count are Tuesday, 21 December 1965 through Sunday, 2 January 1966. Forms will be mailed about 1 December to all of last year's Christmas Count compilers for *Chat*. Anyone else needing a form should request it from the Editor, Box 487, Zebulon, N. C.

To the Editor:

In the June, 1965, *Chat*, Mr. Beckett raises the question of the omission of common names in the later volumes of Peters' *Check-list*. The birds of the earlier volumes were largely widespread, well known species which had acquired literary (not vernacular) names in English. Even so, such literary names are hardly in use outside North America and Great Britain. The *Field Guide to the Birds of Britain and Europe* gives most common names in five languages. When we deal with small passerines of restricted distribution then the vernacular names may be in almost any language and may denominate a genus or family rather than a species. A few Caribbean examples may both illustrate the problem and amuse the reader. The unqualified term "crow" in Jamaica means Turkey Vulture although the popular vernacular is John Crow. The anis are Black Daw (Bahamas), Savanna Blackbird (Jamaica), Old Arnold (Caymans), Chapman Bird (St. Vincent), Old Witch or Tick Bird (Trinidad). The mocking birds (*polyglottos* or *gilvus*) are Nightingale (Jamaica), English Thrasher (Bahamas), and Day Clean (Tobago). There is a similar diversity of French and Spanish names. A number of attractive, anomatopeic names are applied to various vireos: Bien-te-veo, Juan-Chivi, Sewi-sewi, John-Chew-it, Whip-Tom-Kelly. These vernacular names are in general use even by those who know the literary names.—CHARLES H. BLAKE, Hillsboro, N. C., 9 August 1965.

Counting Our Eagles

CBC member Fred May called to our attention a very interesting and encouraging article by Polly Redford in the July 1965 *Atlantic Monthly*. "Counting Our Eagles" is part of her new book, *Raccoons and Eagles*, recently published by Dutton. In compiling material on the survival problems facing the Bald Eagle she consulted William B. Robertson, park biologist at the Everglades National Park, and Alexander Sprunt IV, director of research for National Audubon Society.

After explaining how the Continental Bald Eagle Project was launched in 1960, the author outlines what biologists have learned about the species through cooperative research. Among other things, Sandy Sprunt's eagle-counters have learned that our national bird breeds in five major areas: Alaska (with the largest concentration), Florida (with more than 200 active nests), the North woods-upper Mississippi area (Michigan, Wisconsin, Minnesota), Maine (27 active nests at last count, with only 5 producing young.), and the area around Chesapeake and Delaware bays. Apparently the eagles in Maine and the mid-Atlantic states are not reproducing themselves at a normal rate. Since both these areas have been heavily sprayed with pesticides, this low rate of reproduction seems to confirm Charles Broley's theory (advanced in a letter to the editors of *Audubon Magazine* in 1958) that eagles were being killed or made sterile by pesticide residues in the tissues of the fish they consumed.

Sprunt summed up the present status of the eagle population by saying, "The number of immatures seems lower than it ought to be to maintain the species. But there has been no catastrophic drop here. The bald eagle

(Continued on Page 92)

WHAT OF THE BLUEBIRD?

B. R. CHAMBERLAIN

The 1965 Spring Count in the Carolinas summarized elsewhere in this issue, shows an increase in the number of Eastern Bluebirds found this year as compared with Spring Counts of the past several years. Because of the widespread publicity given the decline in Bluebird population everywhere in recent years, some attempt to evaluate the census results is desirable; for, in spite of the fact that bird censuses are notoriously subject to many variable factors, they can indicate definite trends. Also, when counts are conducted by able and experienced leaders working familiar territory, they can be dependable.

The total count of Bluebirds this spring at 24 locations was 475. This is 7 more locations than have participated in any of our previous spring censuses and to make comparisons worthwhile, these 7 sites are not considered in the following study. The 56 Bluebirds they contributed are deducted from the overall figure of 475. The total thus arrived at, 419, is still well above the 307 birds of last spring. The distribution this year from the sea to the mountains is shown in Table I.

There were no concentrations. The largest numbers were found at Chapel Hill, Greensboro, Raleigh, and Stanly County (Albemarle), all in the lower Piedmont. At these 4 sites, 40 parties found a total of 240 birds. At these same locations last spring 32 parties were able to find but 160 Bluebirds. Possibly 40 parties last year might have located 200 birds. Certainly, the number of parties influences the individual count.

This increase in spring populations prompts an examination of our winter populations. Our Christmas Counts are valuable here since they are conducted by essentially the same people at the same locations. However, Christmas Counts are sometimes followed by damaging weather and are not dependable as winter indicators when considered alone.

Our state books, as well as those of our neighbors, refer to the Bluebird population as swollen in winter by the influx of birds from the North but the extent of the increase is not stressed. In the Carolinas it has been so commonplace throughout the year that it is seldom thought of as migratory.

The range of the Eastern Bluebird (*Sialia sialis*) extends over most of eastern and central North America and it is resident over most of the range. In the east, *S. s. sialis* breeds from the vicinity of Quebec south to the Gulf of Mexico and upper Florida and winters casually as far north as the lower New England states. In central and southern Florida, *S. s. grata* is the breeding race. This enormous resident area doubtless has contributed to the normal abundance of the Bluebird and the widespread familiarity with it.

Reference to Table II will show the magnitude of the winter population and its relation to our breeding population. Presumably the populations are separate. Just how sedentary our breeding population is remains to be answered by the banders.

The spring counts are made within a week or two of 1 May—well after the departure of the Bluebirds that breed to the north of us. The Christmas counts are centered about the holidays within the schedule prescribed by the National Audubon Society.

In evaluating the Spring Counts prior to 1959 allowance must be made for the comparatively poor participation. The numbers of birds shown are probably in the order of one-half of the birds present. But it is the purpose of the table to show the sharp decline in the 1960 counts and the absence of substantial recovery before the Christmas count of 1964.

Although the severity of the weather late in the winter of 1957-1958 dealt the initial blow to the Bluebird population as a whole, the knockout

TABLE I

Region	Locations	Parties	Number of Bluebirds
Coast	4 (4)*	26 (26)	26 (26)
Coastal Plain	6 (7)	14 (15)	52 (57)
Piedmont	7 (11)	52 (64)	341 (383)
Mountains	— (2)	— (5)	— (10)
Totals	17 (24)	92 (109)	419 (475)

* Figures in parentheses include the entire count from 24 locations.

TABLE II

	Spring Count		Christmas Count	
Year	Number of Locations	Number of Bluebirds	Number of Locations	Number of Bluebirds
1955	*	*	19	1011
1956	8	290	20	975
1957	7	424	19	1320
1958	9	264	15	961
1959	12	288	21	946
1960	12	122	19	257
1961	17	282	24	409
1962	15	150	24	329
1963	16	261	23	373
1964	17	307	25	574
1965	17	419	—	—

* Data incomplete.

punch came in March of 1960 and the combination spelled disaster. Summarizing the reports of the latter period in *Audubon Field Notes* [14 (4): 360] Aaron Bagg commented that the "severe weather of that month over the eastern half of the United States had much to do with the fact that the Eastern Bluebird is virtually a rare bird in many sections of its 'normal' breeding range." Details of the unprecedented mortality in 1958, almost to the bottom of Florida, are also recorded in *Audubon Field Notes* [Chamberlain, James, Stevenson, 12 (3):269-272; 259; 271-272 and 13 (3):283-289].

As for recovery, our recent figures point in the right direction but they scarcely go beyond that, and full recovery, if it does come, may be years off. Forbush has been quoted [Hickey, J. J., *A Guide to Bird Watching*, 1943, p. 95] as stating that it took ten years for the Bluebird to recover its normal numbers in New England after the severe winter storms in the southeast in 1895. It seems that our breeding population might be restored first. This is recovery from Nature's onslaughts. Man made deterrents, whether through restriction of breeding places or destruction—or poisoning—of food can produce irrecoverable loss.

Possibly we can speed up the recovery of our "local" birds. Few species are as easily attracted to nesting boxes as the Bluebird. Few projects of this nature could be more rewarding.

Wadmalaw Island, South Carolina
15 July 1965

SPRING COUNT—1965		COAST				COASTAL PLAIN							PIEDMONT											MOUNTAIN	
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Fayetteville, N. C.	Southern Pines, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	King's Mtn., N. C.	Anderson Co., S. C.	Iredell Co., N. C.	Lenoir, N. C.	Ashe Co., N. C.	Jackson Co., N. C.
Common Loon	167	150	8	...	7	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Red-throated Loon	3	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Horned Grebe	3	2	...	1	...	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pied-billed Grebe	19	...	2	2	2	...	...	2	...	2	...	2	...	1	...	2	*		1	2	1	...	...	...	...
Brown Pelican	87	*	1	34	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gannet	11	...	11	...	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Double-cr. Cormorant	185	2	10	28	24	96	17	7	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Anhinga	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Great Blue Heron	95	7	10	36	18	5	2	3	...	1	2	*	...	1	...	1	2	2	1	...	3	1	...	...	...
Green Heron	93	31	8	4	18	1	6	1	...	1	...	*	...	1	...	5	2	2	5	1	4	...	1	...	2
Little Blue Heron	87	8	7	14	52	...	...	1	...	1	1	...	...	1	...	1	...	1	...	...	...	...	...	...	...
Cattle Egret	222	89	8	18	98	1	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Egret	194	27	37	66	63	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Snowy Egret	146	18	35	49	43	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Louisiana Heron	88	9	20	29	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bl.-cr. Night H.	25	18	...	.	5	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
Yel.-cr. Night H.	9	1	2	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	*	...	...	...	...	...	...
Least Bittern	6		3	.	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
American Bittern	7	...	1		.	...	1	1	1	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...
Wood Ibis	26	...	...	9	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glossy Ibis	30	3	16	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
White Ibis	542	...	...	274	268	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Canada Goose	38	...	.	1	...	...	...	...	2	...	...	...	...	...	...	2	15	18	...	...	...	...	...	...	...
Fulvous Tree Duck	4	.	1	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...
Mallard	130	...	2	...	2	1	...	...	4	...	1	9	...	6	6	18	25	56	...	*	...	...	...	...	...
Black Duck	9	3	...	...	...	...	...	...	2	...	*	...	...	...	...	...	...	4	...	...	...	...	...	...	...
Gadwall	36	...	2	31	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1
Pintail	6	...	.	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gr.-wg. Teal	20	.	8	6	...	...	...	...	...	...	*	...	...	...	...	...	...	6	...	...	...	...	...	...	...
Bl.-wg. Teal	156	.	25	50	*	...	...	4	1	...	*	...	...	18	4	41	*	7	...	...	2	2	2	...	...
Am. Widgeon	29	...	2	.	...	...	...	...	...	...	...	...	...	...	...	26	1	...	...	...	...	...	...	...	...
Shoveler	7	...	...	5	*	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Wood Duck	88	...	2	12	1	...	9	6	3	3	5	3	...	1	1	20	8	12	...	...	...	2	...	...	...
Redhead	3	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...
Ring-necked Duck	15	...	1	...	...	4	...	2	...	...	...	...	...	...	...	...	...	3	...	1	2	...	...	...	2

Scaup (sp.)**	271	...	3	25	206	8	...	13	...	...	...	...	...	11	...	3	...	...	...	...	...	...	...	...	2
Bufflehead	8	...	2	...	...	...	...	...	...	4	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Common Scoter	21	9	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ruddy Duck	52	...	...	50	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Hooded Merganser	4	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Common Merganser	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Red-br. Merganser	46	13	9	...	...	2	...	...	...	...	...	...	...	...	...	4	...	15	...	2	1	...	...	...	...
Turkey Vulture	149	...	2	20	26	4	3	7	1	*	...	3	3	6	13	20	6	15	6	7	2	5	...	...	...
Black Vulture	106	...	...	11	53	1	1	7	3	*	1	...	1	3	2	4	1	6	7	*	5	...	...	...	...
Swallow-tailed Kite	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sharp-sh. Hawk	4	...	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...
Cooper's Hawk	9	...	...	1	...	*	...	...	...	...	...	...	...	2	1	2	1	...	...	...	*	...	1	1	...
Red-tailed Hawk	48	...	2	2	6	2	1	3	...	*	1	...	2	2	2	6	*	4	4	...	7	...	2	...	2
Red-shouldered H.	32	1	...	9	...	...	...	4	...	1	...	1	2	2	...	5	1	1	3	1	1	...	...	...	...
Broad-winged H.	17	...	...	...	1	...	...	...	...	*	...	...	...	...	...	7	1	...	3	...	...	...	4	...	1
Bald Eagle	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marsh Hawk	5	...	...	...	1	...	1	...	...	...	...	...	...	1	1	...	...	1	...	...	*	...	...	...	...
Osprey	62	*	15	12	10	2	5	2	...	3	2	...	...	...	1	5	1	4	...	*	*	...	...	...	...
Peregrine Falcon	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Pigeon Hawk	*	...	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	...	...	...	...
Sparrow Hawk	15	...	...	1	1	...	...	1	...	*	1	1	1	2	...	1	...	1	1	...	...	...	...	3	1
Ruffed Grouse	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1
Bobwhite	1,165	23	86	18	45	37	48	37	22	20	46	5	16	76	178	143	61	125	75	13	35	23	20	2	11
Turkey	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
King Rail	4	...	...	1	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Clapper Rail	122	44	28	41	3	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Virginia Rail	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sora	5	1	2	...	...	...	...	1	...	...	...	...	...	...	...	*	...	...	...	...	...	...	...	...	1
Purple Gallinule	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Gallinule	21	1	10	7	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
American Coot	357	...	15	202	2	11	...	36	...	1	...	...	1	3	...	81	...	2	...	*	2	1	...	...	...
Am. Oystercatcher	60	1	45	12	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Semipal. Plover	262	14	82	114	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Piping Plover	12	3	6	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilson's Plover	20	8	8	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Killdeer	113	...	2	...	...	2	3	6	...	4	...	1	1	12	4	22	1	18	30	1	2	...	2	2	...
Bl.-bellied Plover	71	25	38	5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ruddy Turnstone	14	9	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Am. Woodcock	13	1	3	1	*	...	...	...	...	...	...	...	...	...	1	2	...	1	2	...	1	1	...	...	...
Com. Snipe	37	3	3	2	*	1	2	1	...	*	2	...	...	7	...	11	1	2	1	...	*	...	1	...	...
Whimbrel	50	...	4	5	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spotted Sandpiper	166	1	2	17	13	10	...	1	2	12	1	5	1	9	3	14	5	17	12	2	7	16	3	...	13
Solitary Sandp.	85	...	...	3	3	...	...	...	...	9	1	...	...	6	6	11	7	2	23	...	10	...	...	...	4
Willet	431	75	308	12	35	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Greater Yellowlegs	127	26	60	23	...	1	...	4	1	2	...	...	...	5	1	...	2	...	...	...	1	...	...	...	1
Lesser Yellowlegs	62	18	18	10	...	2	...	...	...	...	1	...	...	8	...	...	4	...	1	...	...	...	...	...	...
Knot	150	*	...	...	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purple Sandpiper	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pectoral Sandp.	16	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Least Sandpiper	70	6	38	...	...	...	...	...	5	...	...	...	...	10	...	3	...	...	4	2	...	...	...	...	2
Dunlin	439	200	183	17	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dowitcher (sp.)**	206	125	59	11	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stilt Sandpiper	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

SPRING COUNT—1965		COAST				COASTAL PLAIN							PIEDMONT											MOUNTAIN	
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Fayetteville, N. C.	Southern Pines, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	King's Mtn., N. C.	Anderson Co., S. C.	Iredell Co., N. C.	Lenoir, N. C.	Ashe Co., N. C.	Jackson Co., N. C.
Semipalmated Sandp.	45	18	24		1															2					
Western Sandp.	3			3																					
Sanderling	98	53	13	3	29																				
Bl.-necked Stilt	40			40																					
Red Phalarope	30		30																						
Gr. Bl.-backed Gull	3	*				3																			
Herring Gull	771	300	202	32	49		4	180										4							
Ring-billed Gull	1,151	175	281	39	76	40	18	328		1	1		2	5		26	*	158			1				
Laughing Gull	736	300	179	59	5	16	129	48																	
Bonaparte's Gull	5	1		1		3																			
Gull-bill. Tern	39	28	8	1	2																				
Forster's Tern	25		4		21																				
Common Tern	165	125	31		9																				
Least Tern	393	75	267	16	35																				
Royal Tern	418	225	18	8	133	4	8	22																	
Caspian Tern	29		2		27												*								
Black Tern	36				36																				
Black Skimmer	342	38	130	32	142																				
Mourning Dove	2,219	45	73	22	68	27	25	84	360	62	102	48	37	153	181	255	80	107	109	26	237	89	20	2	7
Ground Dove	6			2	4																				
Yel.-bill. Cuckoo	46			14	20					*	2			3	1		1		2	1	1				1
Bl.-bill. Cuckoo	1																				1				
Barn Owl	7																	2			5				
Screech Owl	11		1			3					*					2				*	3		1		1
Gr. Horned Owl	1		1																						
Barred Owl	32	2	4	1	3	1				*				4	5	1		1	6		1	1			2
Chuck-will's-widow	101		60	2	7	2	5	1		2	1				1	2		1	11		6				
Whip-poor-will	93				1							1		4	5	32	2	14	10	3		14	2	3	2
Nighthawk	41	*	1	7	5		4			*		7		5		5	*	1	4				1		1
Chimney Swift	1,539	5	21	44	26	35	32	36	500	50	20	19	31	57	85	118	100	72	72	15	94	67	20	7	13
Ruby-th. Hum'bird	163	1	6	13	2	2	5	16	1	3	5	6	6	10	24	21	11	10	6	1	3		5	3	3
Belted Kingfisher	79		2	5	7	4	1		2	2	3	*	2	5	3	14	3	11	4	1	1	5	3		1
Yel.-sh. Flicker	552	22	44	11	6	22	15	21	7	8	24	9	9	41	29	136	22	38	22	9	21	8	13		15
Pileated Woodp.	100	2	4	39	11	3	7	7		2	*				5	*	1		1	1	1	6	5		5
Red-bel. Woodp.	487	7	10	44	39	15	2	16	7	14	28	7	7	44	48	97	9	14	40	7	13	14	5		

Red-headed Woodp.	206	3	36	12	3	50	4	22	1	8	11	4	9	10	6	8	5	4	3	1	5	...	...	1	...
Yel.-bel. Sapsucker	21		...	1	...	...	...	...	...	...	...	...	...	1	1	7	1	6	..	1	...	...	...	2	1
Hairy Woodpecker	71	1	2	4	2	3	1	3	1	2	...	1	.	2	16	9	6	7	6	...	1	2	1	1	...
Downy Woodpecker	210		3	11	4	5	5	11	1	6	9	7	4	19	26	41	13	11	14	2	7	6	4	...	1
Red-cock. Woodp.	13			8		3		.	.	...	2	*	...	...	...	.	...	.	...	...	.	...	...	...	...
Eastern Kingbird	489	1	7	20	48	33	39	16	14	21	16	20	18	23	74	34	12	40	15	2	13	2	2	10	9
Gr. Cr. Flycatcher	549	1	20	105	59	39	23	35	12	8	28	4	14	22	23	53	10	12	29	12	17	11	3	...	9
Eastern Phoebe	193	...	...		...	...	...	...	4	...	...	2	8	8	22	47	11	37	11	7	12	6	4	2	12
Acadian Flycatcher	136	...	3	27	..	4	4	4	.	5	...	2	1	8	10	14	8	13	15	1	3	...	1	...	13
Least Flycatcher	13	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	1	2	...	...	...	...	...	...	8
E. Wood Pewee	172	...	1	33	24	10	4	3	..	4	5	1	3	13	23	1	11	8	6	1	8	...	1	...	12
Horned Lark	35	...	...	...	...	...	...	...	...	...	...	2	...	...	...	8	1	8	4	.	1	6	5	...	...
Tree Swallow	1,406	..	410	64	341	2	.	139	2	150	12	*	3	51	9	209	...	...	.	1	6	5	..	...	2
Bank Swallow	30	...	...	...	...	...	...	...	...	5	...	*	...	7	...	11	..	.	...	...	...	...	...	7	...
Rough-wg. Swallow	414	1	14	2	11	5	6	20	46	25	5	2	11	22	25	78	85	5	8	2	15	2	11	...	13
Barn Swallow	1,400	37	102	19	34	35	18	116	430	300	2	6	...	51	15	88	13	59	.	2	7	28	10	16	12
Cliff Swallow	3	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purple Martin	1,006	12	50	92	29	71	55	56	27	60	...	7	4	14	30	174	6	286	1	.	5	21	6	...	...
Blue Jay	2,188	9	95	34	61	73	17	66	31	13	104	46	38	283	127	455	65	145	148	45	124	143	30	15	21
Common Crow	930	28	28	68	36	15	14	38	52	1	39	6	14	49	92	166	20	84	46	17	37	32	11	20	17
Fish Crow	148	7	38	23	23	8	4	25	...	...	...	...	...	19	...	...	...	...	1	...	...	...	...	...	...
Car. Chickadee†	739	36	14	29	44	25	7	30	4	7	25	8	13	49	70	149	33	31	52	11	18	26	10	7	41†
Tufted Titmouse	738	4	14	40	28	11	8	14	12	9	38	12	11	69	63	169	25	39	56	22	19	31	25	7	12
White-br. Nuthatch	81	...	...	1	1	4	...	2	1	1	...	*	1	11	20	17	6	2	6	...	...	...	6	2	...
Br.-hd. Nuthatch	167	3	18	16	3	12	1	7	2	...	12	9	1	7	12	15	1	6	25	4	11	2	...	...	...
Brown Creeper	10	...	...	...	1	...	...	...	2	...	1	...	...	1	...	...	...	1	...	...	1	...	...	...	3
House Wren	98	2	1	...	2	...	...	2	...	...	...	*	4	5	3	19	6	33	4	3	...	1	13	...	...
Winter Wren	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Carolina Wren	673	11	22	93	41	16	9	28	21	14	40	5	6	38	57	59	35	29	48	12	50	13	14	...	12
Long-bil. M. Wren	14	...	10	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Short-bil. M. Wren	6	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	*	...	...	...	...
Mockingbird	2,126	65	157	22	76	61	25	70	38	12	107	57	57	215	197	375	48	169	140	19	123	73	15	3	2
Catbird	695	9	20	9	6	19	4	31	26	5	48	26	5	74	70	46	65	54	26	16	65	15	13	14	29
Brown Thrasher	960	17	41	62	34	39	13	51	18	11	34	17	24	85	69	158	34	106	27	18	47	16	30	2	7
Robin	1,843	...	10	...	3	32	2	30	42	1	95	39	45	278	100	385	110	191	112	18	245	47	20	18	20
Wood Thrush	1,006	...	26	15	...	6	3	13	18	13	24	15	19	109	125	217	48	78	78	18	45	42	30	6	58
Hermit Thrush	23	...	...	2	2	...	...	3	...	*	2	2	...	3	...	1	...	7	...	...	1	...	...	...	...
Swainson's Thrush	42	1	1	1	...	...	...	...	...	...	...	1	...	1	1	3	9	...	22	...	1	1	...	...	...
Gray-ch. Thrush	6	...	1	1	...	...	...	...	...	...	2	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Veery	22	...	...	3	...	...	...	...	...	*	2	...	...	2	2	2	1	...	9	...	1	...	...	...	...
East. Bluebird	475	...	3	7	16	5	5	12	1	19	6	9	10	46	78	44	16	72	40	4	40	20	12	5	5
Bl.-gray Gnatcatcher	509	4	21	103	41	2	...	5	3	7	10	10	3	15	22	117	20	17	44	9	7	43	2	...	4
Ruby-cr. Kinglet	71	2	4	7	...	...	...	1	...	2	9	1	...	2	2	21	7	4	6	...	1	...	1	...	1
Water Pipit	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	1	...	...	...
Cedar Waxwing	976	15	325	6	...	36	21	90	...	*	90	1	35	68	87	12	89	40	36	...	23	...	...	...	2
Log. Shrike	212	...	3	9	13	3	3	3	9	10	10	2	6	30	13	26	2	30	14	2	12	7	2	3	...
Starling	6,168	250	115	42	10	92	111	288	900	46	195	47	62	479	166	801	475	479	307	78	850	303	25	34	13
White-eyed Vireo	478	43	17	150	16	16	13	25	9	7	14	6	6	9	15	46	3	14	21	5	12	8	9	...	14
Yel.-th. Vireo	181	...	3	32	...	5	7	10	...	8	8	2	2	4	10	35	6	5	21	5	5	5	3	...	5
Solitary Vireo	24	...	...	2	...	...	...	...	...	...	...	...	...	3	2	5	7	...	1	...	...	1	1	...	2
Red-eyed Vireo	1,120	...	17	151	27	20	10	26	5	10	36	10	23	43	85	202	68	58	70	20	21	167	20	1	30
Philadelphia V.	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2

SPRING COUNT—1965		COAST				COASTAL PLAIN							PIEDMONT											MOUNTAIN	
	Individual Totals	Morehead City, N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Is., S. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Fayetteville, N. C.	Southern Pines, N. C.	Henderson, N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	King's Mtn., N. C.	Anderson Co., S. C.	Iredell Co., N. C.	Lenoir, N. C.	Ashe Co., N. C.	Jackson Co., N. C.
Bl.-and-wh. Warbler	116	...	1	2	6	2	...	2	1	1	5	3	...	17	8	13	1	5	7	1	2	6	4	6	23
Prothonotary Warbler	124	2	7	22	1	10	4	17	6	8	...	5	...	3	2	12	1	5	7	1	11	...	...	...	...
Swainson's Warbler	3	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...	*	...	...	...	...	...	...	...	...
Worm-eating Warbler	27	...	...	1	1	...	...	1	...	*	*	1	...	5	...	1	2		...	...	6	3	6	...	...
Golden-wg. Warbler	29	...	...	...	...	...	...	...	...	*	...	...	...	...	3	...	*		...	...	...	...	...	...	26
Blue-wg. Warbler	13	...	...	...	*	...	...	...	...	...	2	1	...	2	1	2	1	...	3	...	...	...	1	...	...
Tennessee Warbler	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	1	...	...
Orange-cr. Warbler	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nashville Warbler	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...
Parula Warbler	617	5	128	156	51	38	7	51	4	14	41	2	3	9	18	40	5	...	9	3	...	13	2	...	18
Yellow Warbler	141	...	*	2	...	1	...	1	...	*	5	1	3	5	4	45	17	...	2	6	4	5	15	6	19
Magnolia Warbler	21	...	...	1	2	...	...	4	...	...	*	*	...	10	...	...	*	...	1	...	3	...	...	...	...
Cape May Warbler	52	...	...	...	...	...	...	...	...	...	*	...	...	1	4	1	6	3	30	1	4	...	...	...	2
Bl.-th. Blue Warbler	105	...	1	2	2	...	...	...	2	*	2	7	2	15	12	5	1	2	6	...	1	2	2	2	39
Myrtle Warbler	1,455	3	106	33	11	28	3	145	194	52	90	16	4	58	103	237	31	51	98	10	125	33	15	1	8
Bl.-th. Green Warbler	39	...	3	7	...	...	2	...	...	...	...	...	...	...	3	2	4	4	2	...	...	...	10	...	2
Cerulean Warbler	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	*	...	...	...	...	...	6	...	...
Blackburnian War.	20	...	...	...	...	...	...	...	...	...	...	...	...	2	6	...	...	2	1	1	...	5	1	...	2
Yellow-th. War.	306	...	37	115	27	14	6	19	...	10	...	2	3	7	19	19	6	3	7	8	...	1	2	1	...
Chestnut-sided W.	57	...	...	...	...	...	...	...	...	...	...	...	...	2	2	1	*	...	7	...	3	1	4	...	37
Bay-br. Warbler	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	...	...	...	...	...	...	...	1
Blackpoll Warbler	86	...	...	1	...	3	2	...	...	...	...	...	...	4	4	1	4	1	16	...	15	...	...	...	35
Pine Warbler	229	6	19	47	5	15	5	5	...	15	11	1	4	7	9	24	6	20	13	10	4	...	2	...	1
Prairie Warbler	565	150	55	27	1	29	23	21	...	9	30	2	24	14	45	38	6	11	36	11	21	6	5	...	1
Palm Warbler	12	...	...	1	2	...	...	1	...	...	1	...	...	1	2	2	...	...	...	...	2	...	...	...	...
Ovenbird	223	...	...	2	*	14	...	4	...	4	1	5	15	4	13	39	20	...	15	4	7	11	8	2	55
N. Waterthrush	7	*	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	2	...	1	...	1
La. Waterthrush	59	...	1	...	...	...	...	2	...	*	2	3	1	4	5	9	*	3	7	1	8	...	3	...	10
Kentucky Warbler	62	...	1	...	...	...	...	...	1	2	...	...	5	5	11	6	2	...	13	...	2	...	2	...	12
Yellowthroat	597	32	42	51	10	23	24	17	14	10	15	4	5	27	59	84	17	24	39	12	10	43	20	...	15
Yel.-br. Chat	309	...	16	27	*	5	11	1	...	2	2	...	14	11	31	66	14	6	32	6	14	31	4	4	12
Hooded Warbler	331	5	4	98	2	11	6	6	5	9	8	5	1	15	11	35	17	8	27	3	8	11	16	...	20
Canada Warbler	8	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	2	...	...	...	2
Am. Redstart	374	...	...	2	2	...	...	3	...	*	4	9	15	21	31	160	37	8	27	...	3	13	3	5	31
House Sparrow	5,249	75	283	9	1	333	134	281	500	49	209	107	112	449	183	626	250	566	193	50	565	115	100	38	21

Bobolink	325	...	...	...	...	...	6	...	21	*	...	9	...	2	2	5	...	54	8	...	205	5	8	...	...
E. Meadowlark	1,922	60	67	32	24	32	20	38	66	34	69	8	18	145	234	353	89	219	102	46	105	128	20	5	8
Red-wg. Blackbird	3,909	215	266	113	183	80	169	200	250	71	70	8	15	172	87	532	85	163	48	33	900	93	100	21	35
Orchard Oriole	229	2	15	50	8	18	9	16	...	10	6	1	...	4	4	19	9	18	18	1	16	5	...	...	...
Baltimore Oriole	42	...	2	...	*	...	...	14	1	*	2	*	...	...	3	2	*	4	...	...	2	3	1	8	...
Rusty Blackbird	663	...	...	...	6	...	...	3	21	...	107	...	...	...	...	494	...	...	2	...	15	...	15	...	...
Brewer's Blackbird	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Boat-tailed Grackle	381	67	193	67	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Grackle	3,514	36	40	77	90	411	190	317	190	75	143	32	26	60	31	533	275	174	164	40	172	161	200	58	19
Br.-hd. Cowbird	644	2	2	1	7	19	3	54	...	4	150	...	8	26	19	55	75	24	13	19	48	60	30	15	10
Scarlet Tanager	126	...	...	...	1	2	...	...	...	...	3	1	...	2	30	27	5	11	5	8	*	8	8	4	11
Summer Tanager	447	*	14	66	51	13	2	13	9	12	15	5	11	29	49	47	10	35	23	9	18	12	3	...	1
Cardinal	3,244	150	280	110	240	82	37	130	30	47	155	70	35	207	216	461	170	272	187	49	62	131	50	46	27
Rose-br. Grosbeak	150	1	...	...	2	...	...	...	46	*	1	3	1	2	7	16	3	3	9	1	3	2	2	...	48
Blue Grosbeak	188	1	7	...	5	*	4	6	1	4	7	*	1	5	11	5	2	40	21	7	54	5	1	...	1
Indigo Bunting	557	...	79	52	2	10	41	8	1	1	14	*	14	7	78	16	11	33	61	6	62	8	8	9	36
Painted Bunting	194	3	12	88	91	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dickcissel	*	...	...	...	...	...	...	...	...	...	...	...	...	...	*	...	...	...	...	...	...	...	...	...	...
Purple Finch	8	...	...	...	...	...	...	3	...	...	...	...	...	...	...	2	...	...	...	...	...	3	...	...	...
Pine Siskin	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Am. Goldfinch	1,569	...	72	...	2	50	2	...	12	50	26	*	16	29	116	513	235	127	57	9	31	102	50	15	55
Ruf.-sided Towhee	1,358	75	40	41	21	44	25	66	26	19	68	18	20	99	77	273	79	26	99	24	73	40	50	3	52
Savannah Sparrow	329	44	45	34	9	7	3	37	14	15	5	1	...	35	4	4	2	1	14	*	43	...	10	...	2
Grasshopper Sparrow	131	...	...	...	...	...	...	...	...	...	...	...	...	2	2	42	...	4	26	...	43	...	6	2	4
Henslow's Sparrow	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seaside Sparrow	60	50	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vesper Sparrow	5	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...
Bachman's Sparrow	22	...	10	8	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...
Slate-colored Junco	24	...	...	...	2	...	...	2	...	*	4	...	...	1	1	4	...	1	1	...	...	...	4	...	4
Chipping Sparrow	1,060	3	13	20	2	25	26	8	9	6	53	19	12	62	148	214	70	70	126	40	69	30	15	10	10
Field Sparrow	756	2	15	5	2	5	9	14	...	2	23	1	15	180	54	101	50	35	86	15	54	42	18	...	28
White-cr. Sparrow	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...	...	3	...	8	...	...
White-th. Sparrow	1,910	4	97	75	29	45	...	116	41	27	94	78	34	132	69	319	45	58	116	23	12	462	30	...	4
Fox Sparrow	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Swamp Sparrow	91	1	12	4	...	...	...	20	...	3	5	2	...	8	5	7	1	2	7	...	...	4	...	...	10
Song Sparrow	226	13	2	6	6	...	...	...	...	...	2	...	...	5	1	92	22	...	7	*	7	9	28	3	23
Total Number Species	246	106	155	162	142	97	88	112	72	87	93	82	76	133	114	141	114	117	115	82	116	86	101	52	103
Total Number Individuals	81,795	3,971	6,327	4,585	4,186	2,501	1,577	3,863	4,121	1,568	2,742	946	1,019	4,700	4,219	11,116	3,451	5,049	3,738	914	5,156	2,956	1,352	468	1,270

*Seen in area during count period but not on count day

**See text for species

†Includes 1 Black-capped Chickadee

SPRING COUNT—1965

B. Rhett Chamberlain

Twenty-five years ago Quay recorded the first grouping of spring censuses taken in either of the Carolinas (*Chat*, 4:52-57, 1940). Seven counts, all in North Carolina, were tabulated in that study, and, although no coastal area was included, the 76 observers found 147 species of birds.

Another grouping of spring counts was not made until 1945 but in spite of a halting start the popularity of census taking in the spring has finally brought this activity close in scope and importance to the time honored national Christmas Count, and this year, 1965, our spring census reached a new high in participation and in species found. Jackson County, King's Mountain, Pamlico, and Southern Pines are welcomed newcomers to our spring counting. A total of 315 enthusiastic observers took to the field at 24 locations and checked off 81,795 birds of 246 species. In view of conditions generally favorable to comparison with the 1964 results, it appears that populations were slightly down excepting, perhaps, those along the coast.

The count was taken by 109 parties averaging 2.9 observers to the party. More than 3,000 party-miles were traveled on foot, by car, by boat, by bicycle, and on horseback, and while such extensive coverage does not necessarily insure a large count, it does permit good sampling and representative results.

The 1964 count—about 90,000 individuals in 767 party-hours—was made at 17 locations. Fortunately, all of these points are included in the 1965 census and at these same points only 72,000 individuals were tallied in 794 party-hours this spring. As for species at these locations, 231 were reported in 1964 and 241 in 1965.

Species common to all of our topographical regions numbered 111. Three species were found only in the mountains; 2 species were encountered only in the Piedmont and coastal plains; and 43 species were confined to the coast.

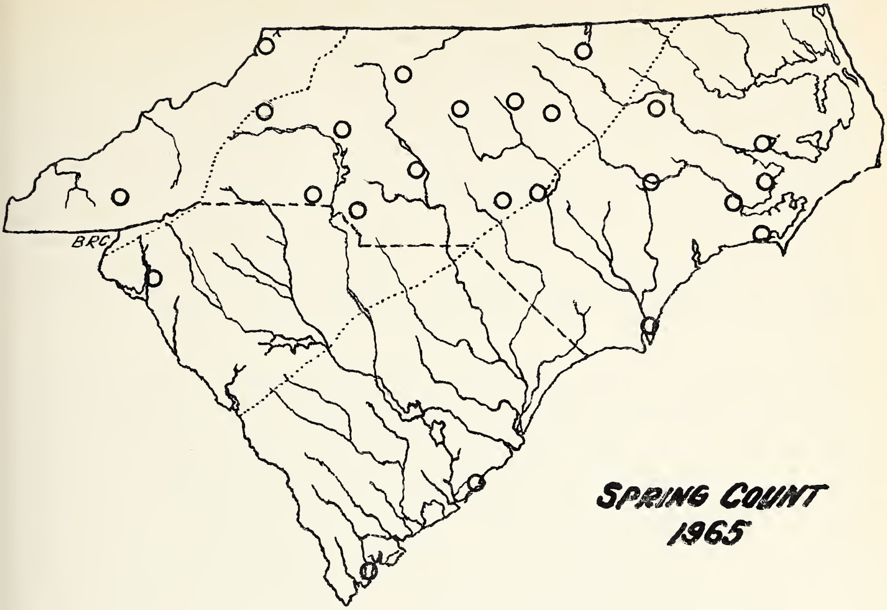
Although 25 species were found only at one location in the present count, few of them were very unusual. In the ocean at Wilmington, within the count area, about 30 Red Phalaropes were seen. Least Sandpipers were identified at Charlotte, and at Chapel Hill a Peregrine Falcon was spotted. These and other unusual observations are noted by the compilers in the location data.

Following rather closely the schedule of last year, the counts were made between 24 April and 9 May. The single exception was 1 April, the date of the Lenoir count. However, it was particularly good for a 2 party count in that area.

Starlings (6,200) and House Sparrows (5,200) lead the list of total individuals, but no more than 900 of the former and 625 of the latter were found at any one location. Red-winged Blackbirds, Common Grackles, Cardinals, Mourning Doves, Blue Jays, and Mockingbirds (2,126) follow in that order. Those eight species provided 35% of the entire census of individuals. Swallows, which swelled last year's count, did not appear in unusual numbers this year, and as far as we know they did not pass through in concentrations before or after the count.

Eastern Bluebirds appeared at all points excepting Morehead City where they are usually scarce. The total of 475 is the greatest total of bluebirds ever recorded in our spring counts. However the population was widespread with no local count exceeding 78 (Chapel Hill). Because of this fact the substantial increase in the overall number was not suspected until the counts were combined.

A population of 150 Brown-headed Cowbirds at Fayetteville (5 parties) is interesting if not encouraging, especially since the number reported



	COAST	COASTAL PLAINS	PIEDMONT
	Charleston, S.C. Hilton Head Isl'd., S.C. Morehead City, N.C. Wilmington, N.C.	Beaufort Co., N.C. Fayetteville, N.C. New Bern, N.C. Wayne Co., N.C.	Anderson Co., S.C. Greensboro, N.C. Raleigh, N.C. Stanly Co., N.C.
Year	**1964 / 1965**	**1964 / 1965**	**1964 / 1965**
Observers	62 / 61	40 / 45	94 / 87
Parties	26 / 26	11 / 12	31 / 31
Species	183 / 216	143 / 150	181 / 169
Individuals	18,699 / 19,069	12,468 / 10,674	43,137 / 26,021
Families and Species			
Great Blue Heron	36 / 71	3 / 11	6 / 7
Cattle Egret	429 / 213	5 / 9	1 / 0
Turkey Vulture	38 / 48	9 / 11	28 / 43
Black Vulture	199 / 64	1 / 9	12 / 18
Bobwhite	101 / 172	147 / 140	284 / 379
Mourning Dove	127 / 208	349 / 275	628 / 752
Flycatchers (6)	232 / 349	362 / 226	436 / 402
Swallows	4,150 / 1,220	2,491 / 1,007	15,276 / 1,088
Eastern Bluebirds	31 / 26	52 / 37	125 / 202
Vireos (4)	195 / 458	731 / 899	1,127 / 1,556
Warblers (10)	481 / 1,174	617 / 775	1,052 / 1,295
Blackbirds (6)	1,570 / 1,292	1,756 / 1,810	3,424 / 3,746

there last spring (3 parties) was 5. In past years heavy concentrations of cowbirds have been confined to our winter counts. The total cowbird count for 1965 was a very high 644. Total spring counts from 1960 through 1964 were: 175, 362, 209, 329, and 287.

An unusual similarity of influencing factors in the 1964 and 1965 counts gives more than average value to certain comparisons. As already mentioned, the 17 locations comprising the 1964 count are included in the 1965 count. Unfortunately no mountain area was censused in 1964. In the following table, four locations in each of the three major topographical regions have been selected for analysis. The choice of locations was based upon parties in the field and geographical location. An examination of the families and species noted here will show some interesting inter-region shifts. For example, there was no appreciable change in the Bobwhite population in the coastal plains whereas the count was up by 72% on the coast and 33% in the Piedmont. The bluebird gain was in the Piedmont.

Anderson, S. C. (all points within a 15-mile diameter circle centered at Anderson Airport, including Hartwell backwaters, the city of Anderson, towns of Starr and Sandy Springs; open land 20%, deciduous woods 15%, pine woods 20%, mixed woods 15%, ponds and creeks 5%, town 15%, Hartwell 10%).—2 May; 4:45 AM to 7:30 PM. Clear; temp. 55-84 F; wind SW 0-8 mph. Eight observers in 4 parties. Total party-hours, 24 (18 by car, 6 on foot); total party-miles, 190 (177 by car, 13 on foot). **Total species, 116; total individuals, 5,156. The Nashville Warbler** (CW, CT, AT) was found in the compiler's yard on count day. It remained there through 5 May. Field marks were carefully checked and voice compared with Cornell recording.—Edward F. Brown, B. Rhett Chamberlain, Mr. and Mrs. J. D. Copeland, R. H. Peake Jr., Adair Tedards (compiler), Connor Tedards, Caroline Watson.

Ashe County, N. C. (all points within a 15-mile diameter circle centered at A. B. Hurt farm house; woods including one thick growth of white pine, open fields, river roads, ponds).—9 May; 5:30 AM to 6:30 PM. Early morning fog clearing about 9 AM; temp. 57-70 F; winds SE 5 mph. Seven observers in 2 parties, 3 individuals working own yards. Total party-hours, 24 (6 by car, 18 on foot); total party-miles, 55 (20 by car, 35 on foot). **Total species, 52; total individuals 468.**—Michael Bare, Ronnie Hughes, Beulah Kiser (compiler), Alice Lyall, Mary Margaret McLaurin, Betsy Quessenberry.

Beaufort County, N. C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County, including both sides of river from Bath to Washington; river and river shore 25%, fields 25%, mixed woods, 35%, pine woods 5%, feeders 10%).—1 May; 5:30 AM to 7 PM. Fair, windy most of day; temp. 50-89 F; wind SW 0-20 mph. Eleven observers in 3 parties, 3 individuals working own yards. Total party-hours, 32 (24 by car, 8 on foot); total party-miles, 130 (120 by car, 10 on foot). **Total species, 97; total individuals, 2,501.** Scaup were determined to be Lesser Scaup.—Mabel Bowen, Ruth Brown, Geraldine Cox (compiler), Rodney Dees, James McLaurin, Mary McLaurin, Tommie Mizelle, Florence Rollins, Louise Satterthwaite, Mary Lee Smith, Melvin Whitley.

Chapel Hill, N. C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin Streets; mixed deciduous woodlands 25%, open fields and farm lands 30%, ponds, lake shores and creek banks 25%, pine woods 5%, wooded residential 15%).—2 May; 5 AM to 6 PM. Clear; temp. 55-90 F; wind calm. Forty-one observers in 13 parties, 5 individuals working own yards. Total party-hours 76 (18 by car, 58 on foot); total party-miles, 140 (103 by car, 37 on foot). **Total species, 114; total in-**

dividuals, 4,219. This is the best list our Club has compiled since the spring of 1961 when 116 species were reported. Probably the most noteworthy observations this time were two **Swainson's Warblers** and a **Peregrine Falcon.**—Charles and Helen Blake, Phyllis Carter, Mr. and Mrs. Richard Chandler, Louise Crumpacker, W. T. Dye, Jules and Martha Favre, John Filley, Ashby and Susan Fristoe, Mrs. John Hanks, Francis and Jean Harper, R. H. Helle, Alexander Hull, Mr. and Mrs. J. L. Irvin, Stella Lyons, Gerald and Elizabeth MacCarthy, Fred Mattis, Mrs. W. D. Patterson, Wallace Patterson, Mrs. J. A. Payne, Wiley Sanders, Peter Scott, Don and Wendy Seanor, Jean Stewart, Mrs. C. E. Stuart, Robert and Elizabeth Teulings (compilers), Matt and Sue Thompson, Adelaide Walters, Josephine Weedon, Frances Yocom, David and Geiger Yount.

Charleston, S. C. (all points within a 15-mile diameter circle centered 14 miles NE of Mt. Pleasant and ½ mile E of US Hwy 17; fresh-water ponds and wooded swamps 25%, mixed and pine woods 25%, open fields and farm land 20%, salt-water creeks and marshes 25%, beach and ocean 5%).—1 May; 6:30 AM to 5:30 PM. Clear; temp. 60-85 F; wind W to S, 5-10 mph. Twenty observers in 6 parties. Total party-hours 57, (6.5 by car, 1.5 by boat, 49 on foot); total party-miles, 182 (125 by car, 4 by boat, 53 on foot). **Total species, 162; total individuals, 4,585.** Our best count to date. Uncommon (but not really unusual) were Stilt Sandpiper, Canada Goose, Swainson's, Magnolia, Blackpoll, and Canada Warblers, Brewer's Blackbird and Brown-headed Cowbird.—Roy Baker, T. A. Beckett III, E. L. Blitch III, E. B. Chamberlain (compiler), David Chamberlain, E. C. Clyde, Teague Coleman, Wilhelmina Coleman, E. R. Cuthbert Jr., E. A. Cutts, E. S. Dingle, H. W. Freeman, Julian Harrison III, William McIntosh, I. S. H. Metcalf, John Metcalf, John Quinby, Elizabeth Simons, Doris Smith, William Smith.

Charlotte, N. C. (all points within a 15-mile diameter circle centered at the intersection of Highway 21 and Woodlawn Ave. to include part of Lake Wylie; lowlands and flood plain areas 30%, open fields and farm land 25%, deciduous-pine woodlands 30%, city parks and lawns 10%, lakes and ponds 5%).—1 May; 4:15 AM to 8:30 PM. Clear; temp. 49-85 F; wind SW 0-16 mph. Thirteen observers in 5 to 7 parties. Total party-hours, 62.5 (7.5 by car, 55 on foot); total party-miles, 255 (219 by car, 36 on foot). **Total species, 115; total individuals, 3,738.** The shorebird count was certainly the best ever for this area, and the four **Least Sandpipers** reported (HLJ, DBW, EBW) were apparently the first from Mecklenburg County. The Yellow-crowned Night Heron was missed for the first time in seven years, but was found the following day.—Flo Cobey, Dr. William G. Cobey, Beth Dykema, J. P. Hamilton, H. L. Jones (compiler), Irene Kittinger, J. C. Meadows III, J. R. Norwood, Mary Nowlin, Mrs. J. C. Pfohl, Dr. Henry Stockwell, David B. Wright, E. B. Wright.

Fayetteville, N. C. (all points within a 15-mile diameter circle centered at Market Square; deciduous-pine woods, swamps, lakes, ponds, open fields, farm lands, city lots).—25 April; 5:30 AM to 5:30 PM. Cool, cloudy; temp. 45-60 F; wind variable N, NE 5-8 mph. Seventeen observers in 5 parties, 3 individuals working own yards. Total party-hours, 77 (44 by car, 33 on foot); total party-miles, 137 (125 by car, 12 on foot). **Total species, 93; total individuals, 2,742.** Rufous-sided Towhees were both red-eyed and white-eyed.—Mrs. George Allee, Derb Carter, Joan Courtney, Margaret Haigh, Molly Haigh, Doris Hauser, Gertrude Huske, May Catherine Huske, Mira J. Jones, Isabel Oates, Ashton Lilly, Helen McGeachy, Lilly Poe, Henry Rankin, Winship Shaw (compiler), Kitty Stewman.

Greensboro, N. C. (all points within a 15-mile diameter circle centered ½ mile SW of WBIG transmitter; deciduous and pine woods 25%, thickets 20%, fresh-water lakes and ponds 30%, open fields 10%, marsh and wooded swamps 10%, lawns and parks 5%.—24 April; 1:00 AM to 7:00 PM. Variable cloudiness; temp. 57-70 F; wind NE 10-16 mph. Thirty-five observers in 10 parties. Total party-hours, 110 (51 by car, 59 on foot); total party-miles, 339 (270 by car, 69 on foot). **Total species, 141; total individuals, 11,116.** Count date was generally early for transient warblers and shore birds, but several winter species were still present. The two **Fulvous Tree Ducks** were in the area for at least two weeks.—Dr. and Mrs. Allen, Rose Avery, Helen Bedon, John Carr, Elene Cobb, Inez Coldwell, Eve Craft, Larry Crawford, Mrs. R. D. Douglas, Charlotte Dawley, Brad Hawkins (compiler), Jewel Kirk, Robert Lasley, Jean McCoy, Ethel McNairy, James Mattocks, Ida Mitchell, Elizabeth Ogburn, Ann Pardue, Mrs. D. A. Parsons, Penny Parsons, Mr. and Mrs. George Perrett, Etta Schiffman, Virginia Sewell, Archie Shaftesbury, George Smith, Mrs. W. F. Smyre, Thomas Street, Helen Suratt, Joan Tipton, Margaret Wall, Daphne Weisner (members and guests of Piedmont Bird Club).

Henderson, Vance Co., N. C. (all points within a 15-mile diameter circle centered at Henderson; meadow lands, edge of forest, by running streams, edge of lake).—1 May; 7:30 AM to 5:30 PM. Sunny; temp. 53-84 F; wind 7-10 mph. Six observers in 1 party, 3 individuals working own yards. Total party-hours 9 (3 by car, 6 on foot); total party-miles, 56 (52 by car, 4 on foot). **Total species, 76; total individuals, 1,019.**—Nieta Allen, Jeanette Bachman, Mary Frances Chavasse, Mariel Gary (compiler), May Hunter, Garnette Myers.

Hilton Head Island, S. C. (all points within a 15-mile diameter circle centered on Hilton Head Island Post Office, including parts of Bluffton, Pinckney Island and Hilton Head Island; mixed woods 25%, field and fresh ponds 25%, ocean and beach 20%, pine woods 5%, tidal rivers, creeks and mud flats 25%).—1 May; 5:00 AM to 6:30 PM. Warm and sunny; temp. 61-82 F; wind SE 5 to 15 mph. 23 observers in 10 parties, 2 individuals working own yards. Total party-hours, 77 (19 by car, 1 by bike, 3 by horseback, 54 on foot); total party-miles, 169 (110 by car, 2 by bike, 10 by horseback, 47 on foot). **Total species, 142; total individuals, 4,186.** Lesser Scaup were recorded.—Nancy Butler, Louise Charnock, Maurice Charnock, Lynette Davis, Violet Duane, Chester Goddard, Judy Goddard, Billie Hack, David Harrall, Virginia Harrall (compiler), Florence Harry, Alva Hines, Charlotte Inglesby, Betty Jordan, Jack Jordan, Ruth Kriz, Henry Lawrence, Mildred Lawrence, Imogene Lowden, Caroline Newhall, Elizabeth Rathbun, Anne Reddy, Marie Reddy, Mrs. K. E. Rhoad, Louis Schweizer.

Iredell County, N. C. (all points within a 15-mile diameter circle centered at junction of Hanes Grove Road and Rural 1872; open farm land 20%, lowlands and river bottoms 60%, deciduous forest 20%).—26 April; 4:00 AM to 5:00 PM. Extremely overcast with fine drizzle; temp. 55-75 F; wind calm to 5 mph, NNE. Four observers in 2 parties. Total party-hours, 21 (5 by car, 16 on foot); total party-miles, 120 (100 by car, 20 on foot). **Total species, 86; total individuals, 2,956.** Two mature **Nashville Warblers** (CS, RU) were seen within an hour of each other in some bottom land along South Yadkin River. Although it was overcast and the light was rather poor, both birds were approached near enough to distinguish the bright yellow throat, white eye ring, and the gray hood.—Mrs. Ralph Goforth, Mrs. James P. Rines, Chip Shafer, Ronnie Underwood (compiler).

Jackson County, N. C. (all points within a 15-mile diameter circle centered 2.5 miles SE of Tuckaseigee on Highway 107, to include Cashiers, Tuckaseigee, Thorpe and Bear Lakes; farm land and pasture 18%, coniferous woodland 20%, deciduous woodland 50%, other 12%).—8 May; 5:15 AM to 7:30 PM. Clear to overcast; temp. 50-81 F; wind SW, 5-15 mph. Two observers in 2 parties. Total party-hours, 16 (4 by car, 12 on foot); total party-miles, 106 (99 by car, 7 on foot). **Total species, 103; total individuals, 1,270.** The **Gadwall** (RHP) evidently was a male. The **Sora** (RHP) was flushed at Cashiers at a range of about 2 yards. The **Black-capped Chickadee** (RHP) was identified by voice at Cashiers.—Richard H. Peake Jr. (compiler), David I. Purser III.

King's Mountain, N. C. (all points within a 15-mile diameter circle centered at Crowder Mountain; open fields and farmlands 25%, deciduous and pine woods 25%, parks 25%, ponds, lakes, creeks and their banks 15%, wooded residential 10%).—1 May; 5:30 AM to 7:30 PM. Sunny, warm; temp. 53-83 F; wind calm. Ten observers in 3 parties. Total party-hours, 36 (21 by car, 7 on foot, 8 on home grounds); total party-miles, 82 (77 by car, 5 on foot). **Total species, 82; total individuals, 914.**—Mr. and Mrs. Glenn Dover, Mrs. L. E. Hinnant, Gussie Huffstetler, R. S. Lennon, Mrs. R. S. Lennon (co-compiler), Dr. and Mrs. O. P. Lewis, Mrs. R. E. McCoy (co-compiler), Mrs. F. R. Summers.

Lenoir County, N. C. (all points within a 15-mile diameter circle contered at Lenoir; including fields, woods, and Hibriten Mountain with an altitude above 2,200 feet).—1 April. Nineteen observers in 2 parties. Total party-miles, 40 (30 by car, 10 on foot). **Total species, 101; total individuals 1,352.** Large numbers of warblers and several Rose-breasted Grosbeaks were found near the summit of Hibriten Mountain.—Jane Abernethy, Mrs. J. S. Bernard, Isabel Bernhardt, Edna Bruner, Margaret Harper, Mrs. Mason Hollifield, Helen Myers, J. T. Ingram, Fred May, E. M. Manchester, Mrs. E. M. Manchester, Tom Parks, Mrs. J. H. Segars, Wendell Smith (compiler), Robert Styres, Mrs. C. S. Warren, Miss George Wilcox, Roger Wilson, Mrs. Roger Wilson.

Morehead City, N. C. (all points within a 15-mile diameter circle centered at Crab Point Intersection; ocean front 10%, sounds, tidal rivers, and creeks 40%, farm lands 25%, mixed and pine woods 23%, fresh-water lake and pond 2%).—25 April; 5 AM to 6 PM. Cool, cloudy with showers in morning; temp. 54-66 F; wind NE to NNW 10-16 mph. Three observers in 2 parties. Total party-hours, 20 (5 by car, 15 on foot); total party-miles, 120 (90 by car, 30 on foot.) **Total species, 106; total individuals, 3,971.** The **Rose-breasted Grosbeak** is notable for the area.—John O. Fussell II, John O. Fussell III (compiler), Tommy Wade.

New Bern, N. C. (all points within a 15-mile diameter circle centered at New Bern Airport to include Neuse River from Broad Creek to Street's Ferry, New Bern, and Trent River to Hardison Farm; fields and marsh 40%, mixed woods 30%, residential 15%, open water 15%).—24 April; 5:00 AM to 6:00 PM. Temp. 49-63 F; wind E 5-15 mph with gusts to 20 mph. Fifteen observers in 3 parties. Total party-hours, 36 (9 by car, 27 on foot); total party-miles, 126 (111 by car, 15 on foot). **Total species, 112; total individuals, 3,863.** Scaup were identified as 2 Greater and 11 Lesser.—Fred Conderman, Margaret Conderman, Allen Connelly, Geraldine Cox, Eleanor Heath, Bob Holmes (compiler), Mary McLaurin, Alex Meadows, Sue Meadows, Marjorie Moore, Allen Olmstead, Louise Satterthwaite, Tom Sherratt, Sandy Siler, Melvin Whitley.

Pamlico County, N. C. (all points within a 15-mile diameter circle centered in Florence at the intersection of roads 1324 and 1329; 15% shore and rivers, 20% marshes, 30% fields, 25% mixed woods, 10% pine woods).—8 May; 5 AM to 7:30 PM. Mostly cloudy, showers all day; temp. 62-82 F; wind SW 0-15 mph. Three observers in 1 party, 1 individual working own yard. Total party-hours, 14 (10 by car, 4 on foot); total party-miles, 64 (59 by car, 5 on foot). **Total species, 88; total individuals, 1,577.**—Geraldine Cox (compiler), Rodney Dees, Melvin Whitley.

Raleigh, N. C. (all points within a 15-mile diameter circle centered at State Capitol Building; lakes and small ponds 25%, pine woods 5%, mixed pine and deciduous woodlands 35%, deciduous woodlands 20%, open fields 10%, pasture 5%).—1 May; 5:00 AM to 7:00 PM. Clear and calm all day; temp. 48-82 F. Thirty observers in 12 parties. Total party-hours, 62 (22.5

by car, 39.5 on foot); total party-miles, 177 (140 by car, 37 on foot). **Total species, 133; total individuals, 4,700.** Lesser Scaup were recorded.—Mike Browne, Charles I. Bryan, Mrs. Charles Bryan, J. W. Chalfant, Mrs. W. R. Clary, H. T. Davis, Mrs. J. W. Duffield, Mrs. A. R. Eckels, Mrs. Virginia Esser, Mrs. David H. Fuller, D. H. Fuller Jr., Deborah Fuller, Charlotte H. Green, J. F. Green, Nancy Greene, R. J. Hader, W. L. Hamnett, Will Hon, Mrs. Robert Jackson, Mrs. W. E. Kelley, J. L. Lamson, Mrs. J. L. Lamson, F. B. Meacham, Darryl Moffett, Mrs. John Rhodes, Mrs. Merle Showalter, Mark Thompson, Mrs. W. L. Wilson, D. L. Wray (compiler), Mrs. D. L. Wray.

Rocky Mount, N. C. (all points within a 15-mile diameter circle centered at Rocky Mount, including parts of Nash and Edgecombe counties; fields and roadsides 40%, lakes and ponds 20%, mixed woods 25%, swamps and marshes 15%).—28 April; 8:30 AM to 6:30 PM. Cloudy; temp. 50-55 F; wind NE 5-10 mph. Three observers in 1 party, 1 individual working own yard. Total party-hours, 10 (4 by car, 6 on foot); total party-miles, 53 (45 by car, 8 on foot). **Total species, 72; total individuals, 4,121.** The **American Bittern** and 46 **Rose-breasted Grosbeaks** are unusual for the area.—Carr Speight, Sarah A. Speight, John L. Thompson (compiler).

Southern Pines, N. C. (all points within a 15-mile diameter circle centered at Southern Pines; lakes and ponds 10%, fields and airport 30% woodlands 25%, town feeders 5%, swamps 30%).—1 May; 5:20 AM to 7:00 PM. Clear; temp. 49-87 F; wind SW 5-8 mph. Two observers in 1 party, 4 individuals working own yards. Total party-hours, 10 (6.5 by car, 3.5 on foot); total party-miles, 79 (76 by car, 3 on foot). **Total species, 82; total individuals 946.** The **Blue-winged Warbler** was the first record for the area. It was observed for 15 minutes and positively identified by field marks and song. The **Mallards** were a female and eight young.—Jay Carter (compiler), Lousie Haynes, Peggy Prime, Mary Keller Wintyen, Ethel Wotton, Leslie Wotton.

Stanly County, N. C. (all points within a 15-mile diameter circle centered at New London; deciduous woods 5%, open fields and farm land 30%, ponds, lakes, rivers 30%, mixed woods and edges 18%, city lawns 10%, marsh 2%, pine woods 5%).—1 May; 5:00 AM to 6:30 PM. Fair; temp. 47-87 F; wind mostly calm. Fourteen observers in 5 parties, 18 individuals working own yards. Total party-hours, 45 (10 by car, 6 by boat, 29 on foot); total party-miles, 154 (118 by car, 20 by boat, 16 on foot). **Total species, 117; total individuals, 5,049.** Most unusual was a flock of 18 **Canada Geese** seen by Harold Morris near the pump station on the upper Badin Lake. Also rarely seen at this time of year were the Little Blue Heron, Slate-colored Junco, and Chuck-will's-widow. A larger than usual number of Rose-breasted Grosbeaks, Scarlet Tanagers, Baltimore Orioles, and Hermit Thrushes were seen. Eastern Bluebirds were about the same as last year.—Erin Blalock, Roy Blalock, Margaret Crawley, Barrett Crook, Vera Crook, George Culp, Nina Eudy, Joe Ferebee, Mattie Gerig, C. M. Haithcock, Lectie Harwood, Gladys Hill, Claude Hinson, Maxine Isenhour, Myrtle Isenhour, Ruth Kerns, Vera Littleton, Barbara Maner, Gladys Mason, Vera Mason, Doris Mauney, James Mauney, Paine Misenheimer, Bessie Morgan, Heath Morgan, Harold Morris, Helen Mount, Spencer Plyler, Addie Thompson, Claudia Wall, John Whitlock, Vivian Whitlock (compiler), Bennie Winget.

Wayne County, N. C. (all points within a 15-mile diameter circle centered at Indian Springs to include Seven Springs, Cliffs of Neuse State Park, Walnut Creek Lake, Sleepy Creek Lake; fields and roadsides 30%, lakes and ponds 30%, mixed woodlands 25%, marsh and wooded swamps 15%).—28 April; 5:00 AM to 5:00 PM. Cloudy, drizzling rain, cold; temp.

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Backyard Birding

ANNIE RIVERS FAVER
Department Editor

Idea Exchange

When driving through south Florida last summer I saw a novel and economical housing arrangement for the Purple Martin. On a pole with cross-arms, there were attached twenty-four half-gallon plastic bleach bottles. They were hung by the handles, and appropriate size holes had been cut in the sides. The colony was occupied, with heads appearing from each bottle.

I would like to have some information on the feeding of nestling Chimney Swifts. Every summer I have the problem of feeding anywhere from three to six nestlings that have fallen from the chimney. If they are over two weeks old and able to cling to the sides of the chimney, I can place them back in the chimney, but if as is usual, they are anywhere from just hatched to a week old, I have the distressing problem of trying to feed them until they are able to leave the nest. I have never managed to keep them alive more than six days. I would appreciate any information that CHAT readers could send me on the problem.—ADAIR TEDARDS, 207 Brown Road, Anderson, S. C.

Magpie Notes From Megpie Gardner

All of us who have missed Megs Gardner from our CBC meetings will be delighted to learn that she is with her husband, Lt. Col. M. D. Gardner, of the Naval Advisory Group, now in Korea. Two clippings from the newspaper, *The Korean Times*, have reached this department, consisting of articles about birds, written by Megs. She writes:

"Nearly every Korean I have met and asked about the black and white bird with the long tail has known it as the Korean Magpie or 'Gachee' as they call it. Since the Magpie was recently selected as the most popular bird in the nation, it seems appropriate to review some of the habits and and folklore about this bird.

"You may be disappointed to know that the Magpie belongs to the Crow family. Being as common as a crow seems to cast a shadow of disrespect on some things. However, in the bird world this species is not really as disgraceful as we are led to believe.

"The Magpie is omnivorous in his eating habits. He eats mostly small mammals such as rabbits, chipmunks, ground squirrels, and mice, which have met their doom along the roadways; and all kinds of insects, including flies and their larvae. He can actually be considered a valuable scavenger since he helps keep the countryside tidy. He also eats some wild fruits, grains, and other seeds when the more palatable articles are scarce.

"You can hardly miss seeing the Magpie's nest if you glance up at the barren branches of trees about you during the winter months. It is more difficult to spot one when the foliage is in full growth. The nest is a sizable dome-shaped bulky mass of large and small sticks, some thorny ones, interlined with a sort of mud cup where the eggs, numbering from five to ten, are hatched. The nest has one or more openings in the sides through which the birds enter and leave. The Magpie builds on to a previously constructed nest with the coming of spring, usually starting in February. This nest building is considered the most obvious part of the act of courtship between the male and female. They are known to use the same nest year after year. It is interesting to note, too, that the same nest may be used by the Feather-toed Owls as a shelter during the winter and by the Broad-billed Roller as a nest after the Magpies have hatched their young and left. The Tree Swallows often nest in the lower part of the nest while it is still occupied by the real owner. Which makes the whole business take on the aspects of a housing project.

"There seems to be a good deal of folklore surrounding the Magpie here in Korea. Some say it is a favorite food of country people but this seems unfounded and denied by most. Others say it is used as a medicine for certain ailments, but they are not specific as to what sickness is cured by the eating of these birds. Small boys still rob the Magpie's nests in the spring in order to be able to eat the eggs on or near 'Boy's Festival Day' to ensure good health in the coming year.

"One interesting Magpie legend concerning a boy and girl in love was related to me by Mrs. Moon and Mrs. Lee, two of my English students. It goes like this: 'A long time ago, a boy (Kyonu) and a girl (Chingnyo) were madly in love. However, their love was forbidden by unrelenting parents and they were separated by a river. They shed many tears because of their sadness. Evidently the Magpies became aware of their plight and decided to do something about it. They gathered in great numbers and formed a bridge in the air over the water so the lovers were able to reunite and live happily ever after.' Presumably, the happy reunion took place on July 7 in that long ago time and to this day it is Magpie Ceremony Day. I can't vouch for this but it would be more than interesting to see how this celebration takes place. To continue the Magpie story . . . . if it rains on the 7th day of July one is reminded of the many tears shed by the lovers during their unhappy separation. The story concluded with the information that on the 8th day of July, the day after the forming of the bridge, all of the Magpies lost their head feathers, leaving a noticeable bald spot. This was not a permanent condition, for Magpies now have feathers on the top of their head. However, if you see a bald Magpie on July 8th, don't be surprised.

"In conclusion, let me tell a little more unconfirmed gossip about the Magpie. If you hear one singing (actually going *Clack, clack*) out in front of your house the first thing in the morning, look for an important visitor during the day. Also, it is a sign of good luck to hear a Magpie clacking early in the morning outside your window."

Nesting Notes From Connemara Farms

The Bluebird Trail has been doing fairly well this year, but the chickadees, wrens and wasps, as usual, took quite a few boxes. I don't begrudge a pair of wrens one bluebird box to raise a family, but the males build in a couple of others as well.

There were six early bluebird nests. One of these, which had three nestlings, was on a fence post in the front pasture, and we could watch the comings and goings of the bluebirds from the front porch. Another box with only three was in the far cow pasture near the woods, and because of the distance, I was not able to visit it much. When I looked in on a clutch of five in the box on the fence post near the pipe bridge across the creek, on May 23, I was delighted at the prospect of such a large bluebird family, but I was not able to take another look at the box until June 20, as it was some distance from the house, and I was very busy. I expected to find the empty nest. But the little female was still patiently sitting on them. Hoping that she might try again with more success, I took the box down and put another in its place. It has been inspected by bluebirds at times, but so far no nest has been built.

A House Sparrow was interested in the new box with the Starling guard that I put up on a fence post in the field below the barn. There was already some meadow grass in it to start a nest. As an experiment to find out whether he would be just as interested in an old weatherbeaten box that I had with me, I took down the box with the guard and put the other up. Surprisingly, the sparrows did not build in it. Either they were discouraged or they did not fancy the old box. It was empty for some time, but bluebirds are in it now, and have four eggs there. The other day I came upon the female when she was engrossed in turning the eggs with her claws. She had no time to be worried or disturbed by me. There was too important business at hand to be attended to.

Her neighbors in the adjoining pastures have finished with the incubation process. I am afraid I startled one little bluebird lady by coming unexpectedly to her box just at the time when the hatching was taking place. Two tiny naked birds were lying beside the broken blue shells, and two eggs were not yet hatched. They still looked like embryos, without any noticeable down and anything more helpless it would be difficult to imagine. And today three young hatched out from the four eggs in the box near the end of the drive. A thin down could just barely be seen on them.

My favorite box, the rustic one near the apple trees, which we call the Coffee Pot box on account of the shape, is ahead of them all this year. A second brood of five has been fledged from it and are flying about in the bushes near the brook. Some young bluebirds, probably those of the first brood, are practicing flying along the pasture fence. At least, that's what it looks like. They fly about five feet above the fence, no higher, and after managing to keep in mid-air by beating their wings fast, they drop to the fence. They repeat this again and again.

Cornell has certainly started me poking my nose into the private family affairs of quite a few bluebirds and wrens this year. I don't think they minded too much, and I have certainly learned a lot while doing it.—MARGARET SANDBURG, Flat Rock, N. C., July 13, 1965

From the Log of Critter Rest, Wadmalaw Island, S. C.

20 June 1965.—At the dock this morning three Brown Pelicans flew by me a scant 100 feet away. They were close together and perhaps 20 feet above the half-tide. Unhurried, they moved their heads neither to the right nor to the left and although I was standing in clear view they ignored me and I was disappointed.

24 June 1965.—This morning at about ten I crossed our lawn and started out over the dam that holds our north pond. I was going to check the water level at the spillway but as I reached it I was startled for a moment by a bird that jumped from the alligator weeds a few feet from me. It was an adult Common Gallinule with a brilliant bill and awkward dangling legs, and it seemed to be as startled as I was for I had come upon it suddenly. It left as speedily as it could in clumsy flight to the upper end of the pond and dropped into the heavy growth there. I expected a squawk but there was none.

This was the first gallinule I had seen in our yard and I promptly left the pond to avoid flushing it again. I was pleased to see the bird and also a bit chagrined because only a few days ago I had explained to my good friend Ellison Williams that our fresh water ponds are entirely too small and too secluded to attract gallinules. Green Herons, Little Blues, Night Herons and an occasional Least Bittern, yes. But not gallinules!—B. R. CHAMBERLAIN.

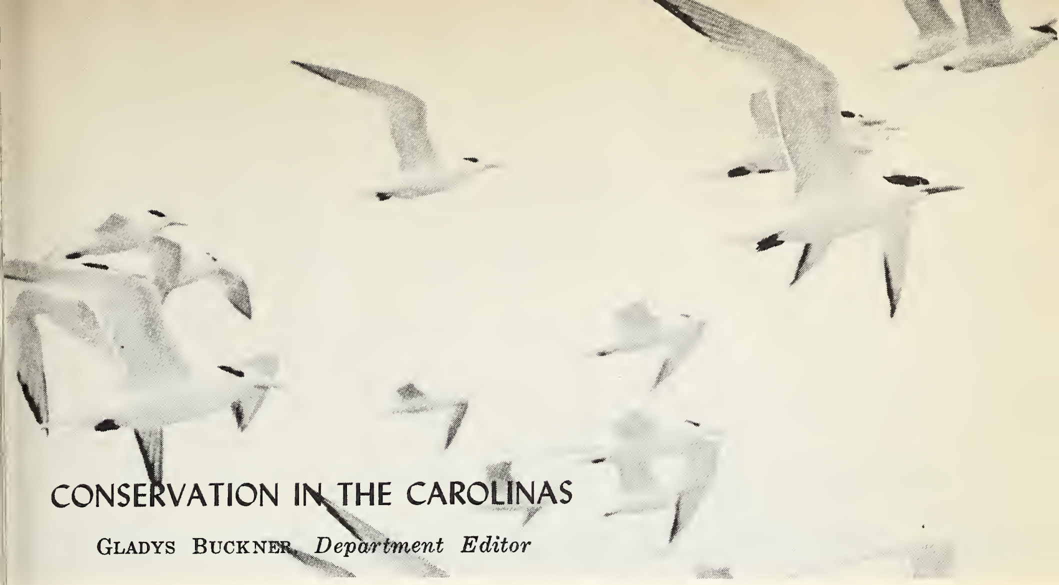
SPRING COUNT—1965

(Continued from Page 78)

52-62 F; wind N 5-15 mph. Two observers in 1 party. Total party-hours, 12 (6 by car, 6 on foot); total party-miles, 110 (105 by car, 5 on foot). **Total species, 87; total individuals, 1,568.** Bufflehead and Hooded Merganser (RHS) were late. Swallow migration was good; figures given are conservative estimates.—David Siler, R. H. Siler (compiler).

Wilmington, N. C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction, including Wrightsville Beach, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, Greenfield Lake, Echo Dairy Farm; mixed pine and deciduous woodland 40%, beach, salt marsh and ocean 35%, fresh water ponds and river 20%, pasture 5%).—24 April; 4:00 AM to 6:00 PM. Cloudy and windy; temp. 56-69 F; wind 12-24 mph E to NE. Fifteen observers in 8 parties, 2 individuals working own yards. Total party-hours, 63.5 (32 by car, 2 by boat, 29.5 on foot); total party-miles, 371 (312 by car, 14 by boat, 45 on foot). **Total species, 155; total individuals, 6,327. Fulvous Tree Duck** (GM, JP) was at Orton Plantation. **Red Phalaropes** (LJ) were in ocean (further details in General Field Notes).—Katharine Alexander, Dot Earle (compiler), John Erickson, Betty Everson, Lee Jones, Greg Massey, Claud McAllister Sr., Florence McAllister, Billy McEachern, Julian Meadows, Polly Mebane, Birdie Menzer, Frances Needham, James Parnell, Mary Urich.

Winston-Salem, N. C. (all points within a 15-mile diameter circle centered at intersection of I-40 and Silas Creek Pkwy; pine woods 15%, deciduous woods 20%, fields 35%, lakes and bottom lands 20%, suburban parks, etc. 10%).—1 May; 4:30 AM to 5:00 PM. Clear; temp. 55-85 F; wind calm. Twelve observers in 6 parties. Total party-hours, 37 (8 by car, 29 on foot); total party-miles, 229 (210 by car, 19 on foot). **Total species, 114; total individuals, 3,451. Pine Siskin** (TS, DS), Gray-cheeked Thrush (RH, FC), and White-crowned Sparrow (RW) were well studied. **Black-crowned Night Heron** (FC, CRH) is uncommon in area. All observers commented upon the scarcity of warblers and the overall poor migration in this area. A pair of **Canada Geese** are nesting in the wild at Tanglewood Park.—Fairman Cumming, Gardner Gidley, Margaret Gidley, John Haney, C. Royce Hough (compiler), E. Wayne Irvin, Martha Killam, Lee Nading, Doris Simpson, Thomas Simpson, Myron Vourax, Roger Warren, Robert Witherington, Mrs. John Spinks Jr.



CONSERVATION IN THE CAROLINAS

Gladys Buckner, *Department Editor*

In a recent letter T. A. Beckett III commends the South Carolina Wildlife Resources Commission for the excellent job of posting done for the protection of the nesting bird colonies along the coast. However, he deplores the further hazard that has developed in addition to the destructive agents previously described: namely, flooding of the nesting areas by spring tides, the lethal effect of chemicals contained in the food supply or from spraying for mosquitoes, the drowning of the young as a result of dredging, or the possible complete destruction of the nesting sites by commercial exploitation. In the following letter Mr. Beckett describes the needless waste of bird life:

> "During my past few visits to nesting colonies located on sand banks along the coast it is apparent that a new type of mortality is occurring on these banks.
>
> "During the past few months the survey teams working with the Coastal Geodetic Survey along the coast have erected wooden towers covered in part by a reflecting plastic impregnated cloth of a bright orange color. It is stated that these towers have simplified the survey work. This I can readily understand because the towers are visible from a great distance.
>
> "The thing that baffles this writer is why after the expense of the construction material plus labor the towers are guyed with such fine gauge wire that in the case of the Deveaux Bank tower it blew down in about a month. In fact, the towers are acting as miniature television towers the year round as far as the birds are concerned. The guy wires are more effective than guns in breaking the wings of the breeding species in residence. No species from the Brown Pelican to the Royal Tern has escaped mortality to date.
>
> "Two things should be done at once. Larger wires or cables should be used as guys and these should be properly flagged from the top of the tower to the ground. The guy wires should be removed as soon as the survey teams accomplish their mission in that particular tower area. The writer feels that these survey teams are aware of this mortality because flimsy pieces of the reflecting cloth have been seen fastened to the support wires.
>
> "The Brown Pelican in particular can stand no needless mortality if it is to remain for even a few more years on our coast. It is a pitiful sight to see healthy adult birds doomed to a starving death because of the

needless false economy of trying to use sewing thread to do the job of a half-inch rope.

"There can be no definite figure on mortality because in most cases only the wing is broken and the bird struggles to the open water. One Brown Pelican, one Royal Tern, and one Laughing Gull each has been found with necks broken on the sand by the towers."

Smith Island Report

The fate of Smith Island is still hanging in the balance. This island, located in North Carolina at the mouth of the Cape Fear River, is the lone remaining portion of the North Carolina coast still covered with large trees and is highly desirable as a wildlife refuge. To quote from a letter to the Raleigh *News and Observer*, 23 July 1965, written by Oliver H. Orr Jr., Smith Island is "uniquely beautiful and scientifically invaluable."

It was largely through the cooperative endeavors of a large number of people interested in the conservation of this island that a report, entitled "Smith Island and the Cape Fear Peninsula: A Comprehensive Report on an Outstanding Natural Area" (Raleigh, 1964) by Arthur W. Cooper and Sheafe Satterwaite, was written. This report is presently out of print, but a copy is available in the library of North Carolina State University and very soon reprints will be available from Dr. Arthur W. Cooper, Dept. of Botany, North Carolina State University.

Dr. Cooper welcomes communications in regard to Smith Island, and those conservation groups that have worked to save it in its natural state welcome the support of all who may come to share in the effort to preserve it for posterity.

Alligators Protected

A law recently enacted by the legislature makes it illegal in North Carolina to take alligators or their eggs. However, it allows a landowner to kill an alligator found on his property. The bill was introduced at the request of wildlife authorities to protect alligators from those who want to secure the expensive hides in order to sell them for manufacturing purposes.

Cape Lookout National Seashore

It appears that the Outer Banks of the Carteret County, North Carolina coast will be approved by the Senate and House as another federal park. As a national seashore area it will afford an opportunity to thousnds to enjoy the pleasures of sea and sand.

GENERAL FIELD NOTES

Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, MD., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

Department Editor: B. R. Chamberlain, Wadmalaw Island, S. C.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal dead-line for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Get the most out your binoculars.—If your glasses are focused by a central screw, the next time you squeak up a bird too close to focus on him, don't scare him off by backing up. Give your right eye-piece a gradual twist and shift to one-eyed operation. You can gain three or four feet that way and increase the image too.

Sooty Shearwater at Bogue Banks, North Carolina.—On 6 June 1965 at Bogue Banks (Carteret County, North Carolina) I saw a Sooty Shearwater *(Puffinus griseus)*. The bird flew along the beach, west to east, pitched in among the breakers and rested for more than an hour within 20 yards of a number of bathers with little apparent concern (bird or bathers). It was not feeding. I have seen a number of these birds off of Seattle, Washington, but this is my first observation on this coast. It is interesting to note that of the seven specimens of Sooty Shearwaters taken in North Carolina (*Birds of North Carolina,* Pearson, Brimley and Brimley) six have come from the Bogue Bank area.—ROBERT P. HOLMES III, *306 Country Club Road, New Bern, North Carolina, 14 June 1965.*

Parasitic Jaeger and Other Seabirds off Murrell's Inlet, South Carolina.—On 19 June 1965 my family and I were fishing the artificial reef 150°, five miles off Murrell's Inlet when we had the opportunity of observing a *light phase* Parasitic Jaeger *(Stercorarius parasiticus)* for fully an hour. There was no possibility of mistaken identity as he was engaged in picking up chum off the stern of the boat and at times was no more than 10 feet away. When not feeding, he was fighting Royal Terns. I never saw him actually rob a tern, but they obviously thought the possibility imminent. He stayed with the boat until we picked up the anchor and went inshore. For the record, it was mid-day, with a cloudless sky and a moderate northeast wind blowing.

On 20 June 1965 we counted 25 Wilson's Petrels at 170°, about 45 miles offshore. Also, there were 2 shearwaters that did not come close enough to make a certain identification.

On 17 June 1965, while we were checking on the colony of Least Terns at Garden City, Georgetown Co., I encountered a juvenile Laughing Gull obviously hatched in the vicinity, as we tested his ability to fly and he was unable to do so. But he could certainly run! Several mature Laughing Gulls were resting on the point, but none accosted us as we walked through the tern colony or the surrounding area, so I concluded that this could have been a case of isolated nesting by the Laughing Gull.

A thriving new colony of Black Skimmers has been completely destroyed by dredging operations on the inlet side of the point. I hope they will find a new site but suitable areas are fast dwindling.—MRS. ELLISON D. SMITH, *General Delivery, Garden City Beach, South Carolina, 23 June 1965.*

Seabirds off the North Carolina Coast in Late April.—On 24 April 1965 I was given the opportunity to study the offshore migration of various birds near Wrightsville Beach, North Carolina, while aboard a local fishing boat. The trip was made in conjunction with the annual Wilmington spring bird census. Though the census area extends approximately 7 miles out to sea, most of my observations were made outside the area and could not be recorded in the count.

The boat left Wrightsville Sound at 6:00 AM for a point 30 miles ESE of Wrightsville Beach, and returned at 3:00 PM the same day. Shortly after we left the sound a cold front moved in rapidly from the northeast bringing low, threatening clouds and winds up to 25 mph. The wind and clouds remained with us for the rest of the day causing very rough seas and making it difficult at times to identify birds, even at a short distance. I was able, however, to make several interesting observations of some of our coastal transients and obtain a rough picture of each species' adherence (or lack of adherence) to land. The following records have been compiled from the notes that I took while on the boat.

Common Loon *(Gavia immer)*—Thirty widely separated individuals were seen at regular intervals until we were about 10 miles out. None was seen again until we were about 13 miles offshore on our return trip. All were flying north.

Red-throated Loon *(Gavia stellata)*—Two were seen together one-half mile offshore. A few birds assumed to be *G. immer* could easily have been this species.

Gannet *(Morus bassanus)*—A total of 15 birds were seen, all of which were first year birds. On our return trip several Gannets were seen just beyond the breakers due, evidently, to the northeasterly winds that prevailed most of the day.

Red Phalarope *(Phalaropus fulicarius)*—Seventy-two birds traveling in small groups, ranging in size from three to thirty birds, were seen during the day. On the trip out the first phalaropes were seen about 15 miles offshore; however, on the return trip a small group of six or seven birds gathered around the boat when we were only 8 miles from shore. This group increased to an estimated 30 birds, then disappeared when we were only 1.5 miles out. Again, the northeasterly winds may have been responsible for these birds of the open seas being seen so close to shore. It may be interesting to point out that about a third of the phalaropes were in full spring plumage. The rest were in varying stages of molt.

Pomarine Jaeger *(Stercorarius pomarinus)*—An adult (light phase) was seen 30 miles offshore. Two other jaegers, too far away to identify safely to species, were seen 25 to 30 miles offshore.

Herring Gull *(Larus argentatus)*—A few were seen as far offshore as our boat went—approximately 30 miles.

Ring-billed Gull *(Larus delawarensis)*—None was seen more than 2 miles from shore.

Laughing Gull *(Larus atricilla)*—These were more numerous than the two preceding gulls and were seen as far out as 20 to 22 miles.

Common Tern *(Sterna hirundo)*—Most of these terns were seen within 5 miles of shore, but one was seen 30 miles offshore.

Least Tern *(Sterna albifrons)*—Five birds were seen, all within one and a half miles of shore.—HARRY LEE JONES, *1616 Wendover Road, Charlotte, North Carolina 28211, 15 July 1965.*

More Caspian Terns at Raleigh, North Carolina.—Four Caspian Terns over Lake Raleigh on 14 September 1963 were reported in the December 1963 *Chat.* The September 1964 *Chat* reports four seen on the Stanly Co., North Carolina spring count (9 May 1964). One more was seen 19 May 1965 and seven more on 25 May 1965 all at Lake Wheeler, Raleigh, North Carolina. They were studied with a 30 power scope from perhaps 100 yards for an hour or more as they rested on a sand bar in the company of eight Ring-billed Gulls. They were also observed in flight. At rest the folded wings extended about 3 inches beyond the tail. The black cap covered the entire forehead. Occasionally one uttered a hoarse cry. In flight the tail showed very little forking. The underside of the wings showed dark primaries while the upperside was white or very light grey. On the following day the Caspian Terns were no longer present.—R. J. HADER, *North Carolina State University at Raleigh, P. O. Box 5457, Raleigh, North Carolina, 21 May 1965.*

Bald Eagle Feeding on Carrion.—On 29 April 1965 I saw an adult Bald Eagle feeding on a dead opossum at the side of a country road about 2 miles from Enfield, Halifax Co., North Carolina. When first sighted the eagle was perched in a tall pine tree, but it flew when I got out of the car to try to get a picture of it. Returning to the area about 3 hours later, I saw the bird feeding on the ground at the edge of the road and was able to get several pictures from a distance of about 30 yards before it flew away a second time. There were several vultures circling in the sky, but they were not close enough for me to identify them. I was told that the eagle was seen at the same spot the day before I found it.—MRS. BRYAN B. PITTMAN, *38 Muney Road, Bay Shore, L. I., New York, 10 May 1965.*

Observations from Great Smoky Mountains.—Eric D. Potter, of Rocky Mount, North Carolina, and I hiked the Appalachian Trail from Davenport Gap to Newfound Gap in the Great Smoky Mountains National Park 21 to 24 May 1965. In almost every detail our bird observations agreed with the elevations and habitats given for each species in Arthur Stupka's very helpful *Notes on the Birds of Great Smoky Mountains National Park* (University of Tennessee Press, 1963). The only surprise of the trip was in the calling of the owls. Ganier, according to Stupka, regarded the Great Horned Owl as a bird of the high and middle elevations; but Stupka's records showed it to be more commonly reported from the lower elevations. Our brief experience apparently supports Ganier's opinion.

Having entered the park on the eastern boundary, we spent our first night on the trail at Davenport Gap Shelter (elevation 2,550 feet). Here we heard the "barking" of a Barred Owl. We spent the second night at Cosby Knob Shelter (4,700 feet) and the third at Ice Water Springs Shelter (5,900 feet). At these two campsites we heard the Great Horned Owl.

Ruffed Grouse were heard drumming 22, 23, and 24 May, and single birds were seen on several occasions.

On 23 May we located four nests of the Slate-colored Junco *(Junco hyemalis carolinensis)*, all well hidden in embankments along the trail. The nest at Camel Hump Knob (5,200 feet) contained one egg and three newly hatched birds. The habitat was a laurel thicket with scattered small spruce trees, decidedly more exposed terrain than that in which we found the other three nests. The nest on Mount Guyot (6,200 feet) contained four eggs. The habitat was small spruce and fir trees with a light undergrowth. The junco nests on Mount Chapman were in mature spruce-fir forest at elevations of 5,700 and 5,750 feet, and each contained four eggs. According to Tanner (*Migrant,* 29:61, 1958), four is the normal number of eggs for clutches begun by juncos in the Smoky Mountains in April, May, or June. Most of the clutches he examined later in the summer were limited to three eggs.—JACK POTTER, *Box 487, Zebulon, North Carolina.*

Traill's Flycatcher Nest Finally Found at North Wilkesboro, North Carolina.—On 30 June 1965 I discovered a nest of Traill's Flycatcher *(Empidonax traillі)* in a thick cluster of privet on the edge of a swamp near the old airport at North Wilkesboro, North Carolina. The nest was a well built cup. It contained four eggs. Three of the eggs hatched on 3 July.

Henry Stevenson and I found Traill's Flycatcher in that same swamp area, 13 June 1956 (*Chat,* 21:3, 1957). He collected one of two singing males to make the identification sure. We both wanted indisputable confirmation so we sent the specimen to Alexander Wetmore, and received what we wanted.

Although satisfactory evidence of the breeding of Traill's Flycatcher has been found at North Wilkesboro and recorded in *The Chat* practically every year since 1956, I believe that the present case is the first in which the nest and eggs have been located in North Carolina.—WENDELL P. SMITH, *911 E Street, North Wilkesboro, North Carolina, 13 July 1965.*

Swainson's Warbler on the Outer Banks of North Carolina.—On 26 May 1965 my brother-in-law, Ben Coffey Jr., of Memphis, Tennessee, and I were headed for Bodie and Pea Island where Ben wanted to record some of the bird songs in that area. After crossing the Currituck Sound bridge at Point Harbor, we took a little dirt road to the right (Rt. 1206) that leads into the village of Kitty Hawk. We stopped there several times and he got a number of good recordings of Swainson's Warbler singing. We had four on that route, but only observed one bird—on the edge of a small pond near the road; a typical nesting area.—FLOY C. BURFORD, *6069 Lake Terrace Circle, Norfolk, Virginia 23502, 7 June 1965.* [Although Swainson's Warbler is no stranger to the northeastern coastal region of North Carolina, this appears to be the first account of its presence and probable breeding on the Outer Banks.—*Dept. Ed.*]

Lawrence's Warbler at Raleigh, North Carolina.— On 29 April 1965 I saw a Lawrence's Warbler along a small stream in the Hemlock Bluffs area near Raleigh. It was viewed in good light at eye level from approximately 25 feet. It had a clearly visible black throat patch and black cheek patch but had otherwise typical Blue-winged Warbler appearance. Significantly, six Blue-winged Warblers were seen on the same day in something less than two hours.

As is well known, the Lawrence's Warbler is the rarer of the two forms resulting from Golden-winged by Blue-winged hybridization. The more common form is Brewster's Warbler. The genetic structure of this complex is described by Parkes in *The Wilson Bulletin,* 63(1):5-15, 1951. It appears that the two hybrid forms breed only in back crosses with parental types. Lawrence's Warbler is homozygous recessive with respect to both throat patch and color of underparts. It can occur from crosses of heterozygous parental types or from back crosses of either hybrid type with heterozygous parental types.

The most recent published sight record of Lawrence's Warbler in North Carolina is for the 1948 spring census at Raleigh (*Chat,* 12:67, 1948).

Only two earlier sightings are recorded (1935, 1938) in *Birds of North Carolina* and in the *Chat* (1[2]:4, 1935 and 2:51, 1938).—R. J. HADER, *North Carolina State University at Raleigh, P. O. Box 5457, Raleigh, North Carolina, 21 May 1965.*

Baltimore Oriole in Charleston County, South Carolina.—On 24 April 1965, on a field trip of the Charleston Natural History Society to Folly Beach, I found a male Baltimore Oriole *(Icterus galbula)* in full breeding plumage. I watched it for approximately 2 minutes with 7x35 glasses from distances as close as 30 feet. The time of the observation was about 8:00 AM; and the temperature about 75 F.

The oriole was found on a point of land on the Folly River where small oaks and pines are growing. In the same area there were several pairs of Orchard Orioles, a Summer Tanager and Great Crested Flycatchers.

Several fellow members of the Society also watched the bird, and among them were E. B. Chamberlain, I. S. H. Metcalf, and John Metcalf.

Although the status of the Baltimore Oriole has changed in recent years, it is still an uncommon bird in the spring in Charleston County.—DAVID CHAMBERLAIN, *334 Stinson Drive, Air Harbor, Charleston, South Carolina, 28 April 1965.*

Brown-headed Cowbird Breeding in Nash County, North Carolina.— On 20 June 1965 at Boy Scout Camp Charles, near Bailey, Nash Co., North Carolina, I saw a grayish immature bird that I thought was a Brown-headed Cowbird. I did not definitely identify it until the next day when I watched it being fed by a Red-eyed Vireo and saw the conical bill and very faint streaking on the breast. It was fully fledged and much larger than the Vireo. I saw it again daily through 25 June. Most of the records of Brown-headed Cowbirds breeding in North Carolina seem to be confined to the western part of the state.—EDMUND WELCH, *P. O. Box 2043, Greenville, North Carolina, 27 June 1965.*

Further Observations on the White-crowned Sparrow at Spartanburg, South Carolina.—In the September 1964 issue of *The Chat* (28:98-99) a report was made on a study of 97 White-crowned Sparrows *(Zonotrichia leucophrys)* and the banding of these birds between 26 January and 2 April 1964. Of this total, 21 recoveries occurred between 8 November and 18 December 1964, this representing 21.6% of the original group. Twenty were retrapped and one was killed by a neighbor's cat.

As reported last September, only 89 of the banded birds could be definitely identified as to age, and of these 27 were adult and 62 were immature birds. Of the 21 returns, 13 were adult when originally trapped and 8 were immature. These figures indicate that 48.1% of all of the adult birds returned to the traps while only 12.9% of the immature birds came back.

It is interesting to note that on several occasions, two birds that were trapped on the same day or within 24 hours of each other in the winter and spring repeated together on the same day on their return in the fall. This would again support the evidence by Blanchard (*Condor*, 38:145-150) that the White-Crowned Sparrow appears to have a true personal attachment between mates.

The total population of this species at my feeders in the fall and winter (1964-1965) was 50 birds. Twenty-one of these represented returns and 29 new birds were banded. This figure is considered to be accurate, as no new bird was taken after 18 December, even though 175 White-crowned Sparrows repeated in the traps from 18 December to 19 April.—JOHN O. WATKINS, *P. O. Box 2687, Spartanburg, South Carolina, 21 June 1965.*

BRIEFS FOR THE FILES

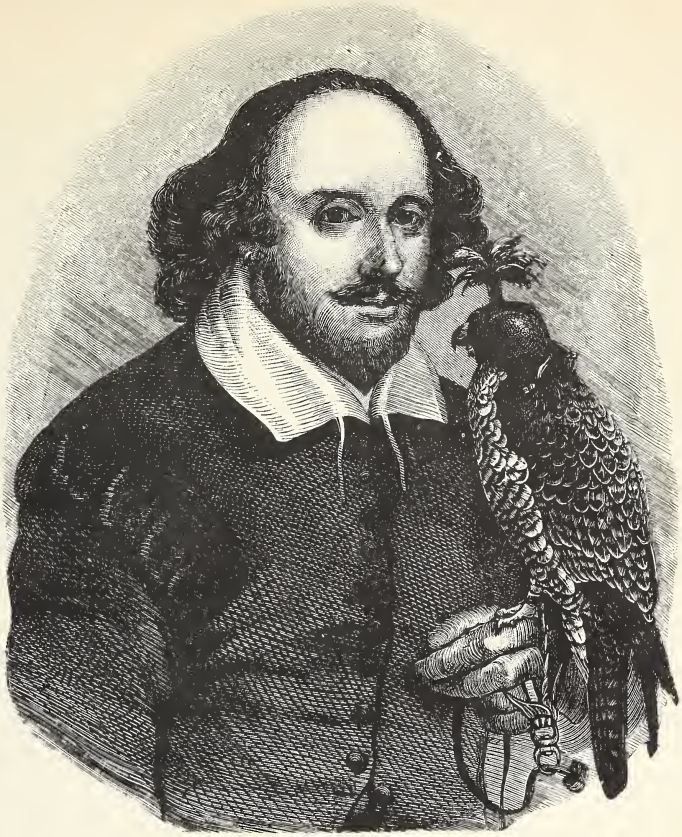
Audubon Shearwater, 1, 16 miles off Charleston, S. C., 9 June, Alexander Sprunt, Jr., • **Wilson's Petrel,** 4, 16 miles off Charleston, 9 June, Alexander Sprunt, Jr. • **Cattle Egret,** 1, my first for this area, 27 April, North Wilkesboro, N. C., Wendell P. Smith. • **Black-crowned Night Heron,** 1, unusual at North Wilkesboro, 27 April, Wendell P. Smith. • **Redhead,** 1 female in a small pond at North Wilkesboro, 25 April, Wendell P. Smith. • **Common Goldeneye,** 4 on Lake Tahoma, McDowell County, N. C., 1 April, rarely found here, Wendell P. Smith. • **Bufflehead,** 1 female, at Raleigh, 10 May, late, R. J. Hader.

Bald Eagle, 1 adult over Lake Wheeler, Raleigh, 26 April, R. J. Hader. • **Common Gallinule,** 1 in pond near old airport at North Wilkesboro, 2 April; 2 young in same pond early in July, Wendell P. Smith. • **American Golden Plover,** 1 near Raleigh, 3 April, Paul Sykes and R. J. Hader. • **Whimbrel,** a flock at Murrell's Inlet, S. C., 30 June, early, Mrs. Ellison D. Smith. • **Upland Plover,** 1 near Raleigh, 28 March, Lee Jones. • **Solitary Sandpiper,** 11 in pond at North Wilkesboro, 27 April, Wendell P. Smith. • **Pectoral Sandpiper,** 1 at North Wilkesboro, 2 April, Wendell P. Smith. • **Least Sandpiper,** 1 at North Wilkesboro, 29 April, Wendell P. Smith. • **Dowitcher** (sp), 1 in non-breeding plumage 27 March; 1 in breeding plumage 27 March; 1 in breeding plumage, 3 May, Raleigh, R. J. Hader. • **Semipalmated Sandpiper,** 1 at North Wilkesboro, 5 May, Wendell P. Smith. • **Forster's Tern,** 3 over Lake Wheeler, Raleigh, 26 April, R. J. Hader, • **Caspian Tern,** 1 along Yadkin River at Winston-Salem, carefully checked, 8 May, Royce Hough.

Ground Dove, very plentiful this spring at Garden City Beach, Horry Co., S. C., Mrs. Ellison D. Smith. • **Black-billed Cuckoo,** 1 at North Wilkesboro, 3 May, Wendell P. Smith. • **Great Crested Flycatcher,** 1, Charlotte, 14 April, early, Lee Jones. • **Bank Swallow,** several, Raleigh, 29 April through 11 May, nowhere as abundant as last lear, Lee Jones. • **Barn Swallow,** nested this spring under the same house where it nested last summer at Garden City Beach, S. C.; 3 pair nested under a dock at Murrell's Inlet this summer, Mrs. Ellison D. Smith. • **Cliff Swallow,** 1 at Raleigh, 29 April, the only one I saw all spring, Lee Jones.

Philadelphia Vireo, 1 at North Wilkesboro, 6 May, Wendell P. Smith. • **Black-and-white Warbler,** 1 at Camp Charles, Nash County, N. C., 23 June, Edmund Welch. • **Prothonotary Warbler,** 1 at Charlotte, 15 April, very early for Mecklenburg County, Lee Jones. • **Golden-winged Warbler,** 1 on Reynold's Estate, Winston-Salem, 30 April, Royce Hough. • **Cerulean Warbler,** 2, Reynold's Estate, Winston-Salem, Wayne Irvin, *fide,* Royce Hough. • **Wilson's Warbler,** 1 female at Reynold's Estate, Winston-Salem, 26 April where 1 was found last spring, Royce Hough. • **House Sparrow,** 1 albinistic, in yard of Dr. and Mrs. Murray Senkus, Winston-Salem, 13 July, a dirty white with dark eyes, in company of about 35 House Sparrows at feeder, R. H. Witherington. • **Orchard Oriole,** 1 at Raleigh, early, 13 April, Lee Jones.

Brown-headed Cowbird, 1 female, 21 May and 1 young 13 and 14 June, in Charlotte yard, Rebekah Norwood. • **Scarlet Tanager,** 1 at Raleigh, 11 May, Lee Jones. • **Rose-breasted Grosbeak,** 1 at Charlotte, early, 14 April, Lee Jones. • **Painted Bunting,** more plentiful on Wadmalaw Island, S. C. this spring than I have found them since my arrival here in 1960, B. R. Chamberlain. • **Purple Finch,** 1 in city yard, Charlotte, 17 April, a bit late, Rebekah Norwood. • **Henslow's Sparrow,** 1 at North Wilkesboro, 22 April, Wendell P. Smith. • **White-throated Sparrow,** 1, dull plumage, in Charlotte yard 9 June, song last heard 21 May, Rebekah Norwood. • **Slate-colored Junco,** 1 at Charlotte, 1 May, late, Lee Jones. *All dates 1965.* Compiled by B. R. CHAMBERLAIN.



WILLIAM SHAKESPEARE
From the Chandos Portrait

BOOK REVIEWS

The Birds of Shakespeare. James E. Harting, edited by Grundy Steiner. 1965. Argonaut, Inc., 737 N. Michigan Ave., Chicago, Ill. 60611. v-xxxviii + 320 p. Illus. Appendix. Index. $7.50.

Originally published as "The Ornithology of Shakespeare Critically examined, Explained, and Illustrated" (John Van Voorst, London, 1871), this handsomely produced second edition will delight students of Elizabethan England, particularly those who happen also to be interested in natural history. The casual reader of Shakespeare has no idea how frequently references to birds occur in his writings. Hamlet alone, for example, contains two dozen allusions to birds, including the Prince's description of himself as being "pigeon-liver'd."

James Edmund Harting (1841-1913) was one of Britain's outstanding ornithologists and a scholar of remarkable breadth. His long career began with the practice of law, but gradually his zoological investigations led to the giving up of his solicitor's practice in 1878, a year after he became editor of *Zoologist.* Particularly interested in falconry, Harting wrote a dozen books about bird study, shells, and other subjects, including a *Handbook of British Birds* (1872).

In the process of explaining Shakespeare's references to birds, Harting makes many delightful excursions into the sidelights of history, literature, and science. As should be expected, he devoted many pages to falconry. A useful appendix coordinates each mention of a bird by Shakespeare with the pertinent pages in Harting's text. The 34 steel engravings are on the whole both informative and attractive.

Editor Steiner's prefatory comments are very helpful to the reader who may be unfamiliar with metaphoric references to birds in literature. Despite its scholarly attributes, *Birds of Shakespeare* is enjoyable reading, and it will undoubtedly be greatly appreciated by teachers of English literature.—EFP

North American Bird Eggs. Chester A. Reed. 1904. Revised by Paul A. Buckley, 1965. Dover Publications, Inc., 180 Varick Street, New York, N. Y. 10014. 372 p. Illus. Index. Paperbound, $3.00.

Although first published when egg collecting was a popular hobby, this book emphasizes the rewards of studying living birds and their nesting habits. A typical species listing gives the AOU number, common and scientific names; a life size photograph of the egg; a marginal line drawing of the bird (undoubtedly of much usefulness in the days before the Peterson and Pough guides); range; brief comments on field marks, behavior, and habitat preference; description of nest; number of eggs in clutch; color, texture, and size of egg. Additional photographs show many nests in the wild. Buckley has done a competent job of updating nomenclature and noting major changes in range without intruding unnecessarily upon the original text.

Nature students of today, long accustomed to various field guides with color plates or keys to identification, may at first glance see little value in republishing Reed's work of more than 60 years ago. However, anyone who really wants to study bird eggs and nests will find this book a concise and useful reference, small (6⅛ x 8⅜ inches) and inexpensive enough to be taken into the field and really used.—EFP

NEWS AND COMMENTS

(Continued from Page 63)

is probably undergoing a slow decline. . . . We know that pesticides are contributing to it . . . but there are other factors, too. In spite of twenty-five years of protection, many bald eagles are still being shot, probably immatures. Now, if we could stop the shooting, this might be a big enough factor to stop the present trend."

The author wonders if a sensible educational program can overcome the myths about eagles that kill cattle and carry off babies. She also wonders if Americans are willing to leave enough uncut woods, unpolluted rivers, and unspoiled lakes to meet the nesting and feeding requirements of the species. Admitting that our national bird has no commercial value, she concludes that if this species dies, "it will be because this continent is no longer fit for a wild, free-moving thing to live. In this, our threatened eagle symbolizes America in a way it never has before. If we lose it, we shall have lost more than a bird."

Carolina Bird Club
INC.

Founded 6 March 1937 *Incorporated 8 August 1949*

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

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The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. Annual dues for the classes of membership are: Regular, $1; Affiliated Club, $2; Family, $3; Sustaining, $5; Contributing, $25; Life, $100 (payable in four consecutive annual installments). Checks should be made payable to Carolina Bird Club, Inc., and sent to Box 2281, Raleigh, N. C.

THE CHAT

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All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes and Backyard Birding departments should be sent to the department editors. The Editor requests that all manuscripts be typed, double-spaced, on plain white paper.

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The Chat

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The Chat

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Editor ---------- Eloise F. Potter, Box 487, Zebulon, N.C.
General Field Notes ---------- B.R. Chamberlain, Rt. 1, Wadmalaw Island, S.C.
Backyard Birding ---------- Annie Rivers Faver, Rt. 2, Eastover, S.C.
Conservation ---------- Gladys Buckner, 500 West Ave., North Augusta, S.C.
Editorial Board ---------- Thomas L. Quay, B.R. Chamberlain, Charles H. Blake
Contributing Editors ---------- John K. Terres, Jack Dermid, John Henry Dick, and Alexander Sprunt Jr.
Associate Editors ---------- Thomas W. Simpson, Kay C. Sisson, James F. Parnell, Doris C. Hauser, Ernest Cutts, and Adair M. Tedards

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OUR COVER—A Carolina Wren photographed by Jack Potter.

PRESIDENT'S PAGE

At this early writing for *Chat*, I find myself caught between several things which have already happened, and events that are still pending. Assuming that pending actions will continue to be favorable, I will proceed to report on my actions since the Fall Field Trip Meeting at Blowing Rock, last October.

We were all "shook up" over my announcement about the 83-acres of land being offered to the Carolina Bird Club, for a Wildlife Sanctuary. Opportunity was suddenly knocking at our door. You have received and read the Newsletter, dated October 20th, and are familiar with its content.

Information contained in our Charter and Bylaws, and on the back page of any *Chat*, just does not spell out what we all have been taking for granted for so long. On August 28, 1949, our CBC Charter of Incorporation was granted under the provisions of a State Statute then existing. Since then (1957) a new Statute was passed spelling out more specifically and clearly, the qualifications under which non-profit organizations will be granted for tax deduction purposes. This fact apparently never reached the attention of our club. Obviously, something had to be done and done quickly, otherwise, the property which has been offered to us was not available.

Joseph Schatz, lawyer and new member of our club since the Clemson Spring Meeting, volunteered his services to help me with the legal matters concerning our Charter. We made a 3-day trip to Greensboro and Raleigh, where we visited the respective offices of the Directors of Internal Revenue of the Federal and State Governments. We were given the exact wording for amendments to our Charter to bring it in line with the provisions of both Federal and State Statutes. Armed with this information, we went to Zebulon, where we engaged the services of Jack and Eloise Potter for printing a Newsletter, dated November 17th, which is now in your hands and self explanatory. I telephoned the members of the Executive Committee (two could not be reached) to advise them on what was going on and to get their approval. I admit that the procedure was like a "shot-gun wedding," but the job had to be accomplished whether or not we accept the property. Time was of the essence if we are to accept the property. Wherever our Charter and Bylaws were silent, the provisions of the State Statute were followed in getting this job done.

We are waiting now for the results of the voting at the December 4th Special Meeting of the membership at Tryon, N.C., and by the time you receive this *Chat*, they will be known. Joe Schatz and I will then return to Greensboro and Raleigh, to personally deliver the amended Charter into the hands of the same officials, who have helped us so much, for dating and filing. They have already assured us that tax deduction privileges will be retroactive to 1965, in event that final paperwork and transfer of the property might be delayed into 1966. I am keeping the donor and her lawyer advised of our problems and progress, and she is kindly patient.

The Investigation Committee which I appointed has already met at the property, and after careful and searching deliberations, voted unanimously by secret ballot, 8 to 0, recommending that the Executive Committee accept the property if it was deemed in the best interest of the CBC, for the purpose intended. After the Charter has been filed at the State and Federal Tax Offices, the Executive Committee can meet and consider the whole project, and render its "verdict." Also, after the Charter has been amended, our Bylaws will have to be amended to bring them into line with the provisions of the Charter. There are other items in, and for, the Bylaws that should be considered and incorporated at the same time. Joe Schatz and I are working on them in the form of proposals to the Executive Committee, and eventually to the membership for their adoption.

My thoughts naturally turn to the ways and means by which funds will be provided for the maintenance and development of the Sanctuary, once it is in our hands. In the event that your Executive Committee should decide to accept the property on the basis that no funds were presently in sight, such a decision would have to be made as a "calculated risk" in the hopes that the membership would be interested enough to provide, at least, sufficient annual funds for maintenance of the property in an "as is" condition. Any development of the property would, of course, depend upon additional funds made available for specific purposes. This is for the future. We are concerned now with the present, while decisions are being made, and in this connection, I wish to make some comments: Generally speaking, and let the chips fall where they may, any organization runs on *motivation*, on *conviction*, and on *morale*. Its members *have to believe* that it really makes a difference whether their organization does well, or badly. *They have to care!* They must also realize that progress is not accomplished by an apathetic membership, and that it requires high motivation to progress. It is now time that our members should take a new look at their club and make a personal decision as to just what the CBC means to you, to the State, and to the Nation. Surely we are capable of making our organization something more than just a social and bird-counting club! We have never been in a financial position to purchase our own property, nor to assist other organizations in doing so. Perhaps this has been because we have had nothing "concrete" to offer our membership, or to outsiders, to attract money for such purposes. Now we have that opportunity, so let's find out, once and for all, what our CBC is capable of accomplishing. Talk is one thing, but *money* talks much more convincingly.

Once the property is in our hands, appropriate appeals and campaigns for funds will follow, and I trust the overall response will be generous. If an endowment fund could be built up to proportions which would yield sufficient dividends to maintain the sanctuary, this would be the best position our club could be in. Let us work to that end.

* * * * *

MID-WINTER FIELD TRIP MEETING—I have been advised that the Charleston Natural History Society (one of the most active and scientific clubs in the Carolinas) will gladly host this meeting which will be held at Charleston, S.C., on dates of January 14 and 15, 1966, with Headquarters and Registration Desk at the Charleston Museum. Charleston is steeped in the early history of our land, and is situated where famous rivers join to meet the sea, providing environs and natural habitat which attract birds of many species during migration, winter, and nesting periods. Our members can be assured that the Charleston Society will go "all out" to make this a most interesting and successful meeting. I hope that there will be a large turnout of members for a new record of attendance. Jot the dates on your calendar NOW, and be sure to attend the meeting. The following list of places for lodging are only a few of the many excellent accommodations available. These are said to be within the most convenient distances from the Museum. Most have dining rooms, or have restaurants nearby. Meals are not included in the prices given below:

Downtowner Motor Inn—157 Calhoun St. Single, $7.50; 2 persons, $10.00; 2 double beds, $12.00.
Orvin Motor Court—194 Calhoun St. Single, $6.00 to $7.00. Double, $8.00 to $9.00. Twin beds, $9.00 to $10.00.
Evert's Motel—172 Cannon St. Single, $6.00. Double, $10.00. Three, $12.00.
Castle Pickney Inn—175 Cannon St. Single, $7.70. Double, $11.30. Each extra person, $2.50.
Holiday Inn (Downtown)—Meeting St. & Calhoun St. Single, $8.00, $9.00, $10.50. Double, $12.00, $14.00.
Charleston Inn—35 Lockwood Dr. Single, $7.00, $8.00, and $10.00. Double, $10.00, $11.00, and $13.00. Each extra person, $2.50.
Hotel Ft. Sumter—Charleston, S.C. Single, $8.00, $10.00, and $12.00. Double, $12.00, $16.00, and $18.00. Extra person, $2.50.
Jack Tar Francis Marion Hotel—Charleston, S.C. Single, $6.50, $8.00, and $9.00. Double, $9.00, $11.00, and $14.00.

DON'T FORGET! SEE YOU AT THE MEETING!

CLIFF SWALLOWS NESTING IN SOUTH CAROLINA

ADAIR M. TEDARDS

To the human eye, Hartwell Dam, situated on the upper Savannah River between Georgia and South Carolina, is an imposing example of man's engineering skill. To Cliff Swallows (*Petrochelidon pyrrhonota*) migrating northward in the spring of 1965, the dam was seen as a good nesting site. About 50 of these birds remained there to raise broods, thus establishing the first breeding record for the State of South Carolina.

The A.O.U. *Check-list of North American Birds* (1957) gives the breeding range of one subspecies of the Cliff Swallow (*P. p. pyrrhonota*) as extending from Canada south to, among other places, "southern Illinois, west-central Tennessee (along Tennessee River), northern Alabama, the mountains of western North Carolina and Virginia, northern Maryland, southeastern Pennsylvania, and southern New Jersey." *Birds of North Carolina* (Pearson, Brimley and Brimley, revised 1959 by Davis and Wray), however, does not mention any breeding records for that State. According to *South Carolina Bird Life* (Sprunt and Chamberlain, 1949), the Cliff Swallow is considered an uncommon transient in both spring and fall through the State. With one exception, all listings up through the year 1947 were below the fall line. More recent, but still few, records bear out the fact that the species is still uncommon, not just having been overlooked due to few observers. As can be seen in Table I, at no time in the past five years has the Cliff Swallow constituted as much as 2% of the total number of swallows (martins excluded) sighted by Spring Count observers in the two Carolinas (*Chat*, 25:52-63; 26:58-69; 27:49; 28:75-85; and 29:69).

COLONY DISCOVERED

On the afternoon of 23 May 1965, Caroline Watson of Anderson, S.C., was visiting Hartwell Dam where she noticed about 25 swallows of a species that she had never seen. She identified them as Cliff Swallows with the aid of her field guide. On the following day, she called and asked that I go with her to verify the identification. We made a trip that morning, and after watching for a few minutes, located the swallows directly over the river below the sluice gates. They were indeed Cliff Swallows!

That evening my husband (R. Connor Tedards) and I paid a visit to the dam with the intention of trying to locate some nests. On this trip we drove to the Georgia side of the river and into the parking area near the power house. From a fishing ramp below the parking area, we were able to see two nests. We estimated the number of swallows at close to 50. Because of the activity in the vicinity of the two nests, we were positive that there were more which were not visible because of evening fog rising from the river.

To convey some idea of the location of these nests, and the subsequent difficulty involved in getting an accurate count of either nests or contents, it

TABLE I. *Cliff Swallow sightings on Spring Counts in North and South Carolina, 1961-1965.*

Year	Total swallows*	Cliff Swallows	
1961	3,631	64	(1.86%)
1962	1,041	6	(0.57%)
1963	1,189	1	(0.08%)
1964	23,152	366	(1.58%)
1965	3,253	3	(0.09%)
	32,266	440	(1.36%)

*Includes Tree, Bank, Rough-winged, Barn, and Cliff Swallows.

is necessary to give a description of the spillway construction at the dam. The generators are housed in a concrete structure on one side of the face of the dam. Directly below and in front of the generators are 10 sluice gates which discharge the water as it leaves the generators. These gates are roughly 20 feet wide and 30 feet high. They are of concrete and the water is discharged through metal pipes situated at various levels in the sluices. In addition, there are emergency metal gates called "stop logs," which can be lowered in front of the sluices. These logs are reinforced at the bottom with a series of triangular metal ribs. It was against these ribs, on the bottom of the gates that many of the nests were located.

At the time the nests were being built, only four of these stop logs were in position in the sluices. The others had been removed for painting and repair. The four remaining were in the one-third down position. Of the 16 nests eventually located, 10 were built on the bottom of the stop logs, 5 were located on the concrete faces of the sluices, and 1 on the power house itself. The last nest built, the one on the power house, was completed, but apparently never used.

The first two nests located were built on the bottom of the stop log in the third sluice from the Georgia side of the river. These two nests were against the same rib, one above the other. Subsequently, two more nests were added to these, making a four-room "apartment" with each unit occupied.

In an effort to get closer to the nesting activity, and possibly to get photographs, we contacted Reservoir Manager John LeRoy about the possibility of taking a boat up under the sluices. He believed the water to be too turbulent and suggested instead that he conduct us across a restricted area of the river bed below the flood gates. There, he thought we could get as close as 30 feet to a nest.

In preparation for this trip, we contacted Jay Shuler in Greenville, S.C., to ask if he wanted to try for photographs. Early on the morning of 26 May, led by Mr. LeRoy, Mr. Shuler, Mr. Tedards, and I made a dash across about 200 yards of slippery river bed rock. The dash was necessary because we were allowed 40 minutes in and out of the restricted area before the flood gates were opened to send water down-river to the Clark Hill Reservoir. After crossing the river bed we climbed atop a concrete groin running out and below the sluices for about 20 feet. From this precarious perch we were able to see directly up to two nests, and Mr. Shuler was able to get recognizable pictures in spite of poor lighting conditions and the threat of being washed down the Savannah River.

NEST CONSTRUCTION

Most of the nests that we were able to see distinctly were retort, some having extremely long neck-like entrances. Some few were more the shape of a "hornet" or "paper-wasp" nest. Nests in the process of construction strongly resembled those of the Barn Swallow.

There was a readily available supply of mud from two sources. A small creek runs down from the South Carolina side into the river bed below the dam; and in addition, there was a slight spill-over from one of the flood gates which kept a small rivulet flowing down the earthen part of the dam. We observed birds gathering mud from both these sources. We could not tell if straw or grasses were being used in construction as well as mud.

The State of Georgia, due to location of the dam, has a justifiable claim to at least part of the colony, but I believe that all the nests were constructed of South Carolina mud!

There were 13 nests completed by 28 May. The last nest to be constructed was the one on the power house some distance away from the others.

It was begun on 1 June and completed on 19 June. I would like to quote a paragraph from Mrs. Watson's notes on the building of this nest.

"On Tuesday, June 1, on the south side of the building [power house], I saw five swallows hovering about a spot about thirty-five feet up under the eave of the building. The nest was started by one bird with a small amount of mud about the size of a marble. One bird clung to the building about five inches from this spot and appeared to be an observer. Another bird would hover close for some minutes as if drying the mud with its wings as it was placed by other birds." On 4 June she wrote, "The nest looks like that of a Barn Swallow but the birds are still building. One bird stays and works on the nest while another goes for a pellet of mud. The one that stays seems to be working on the interior of the nest."

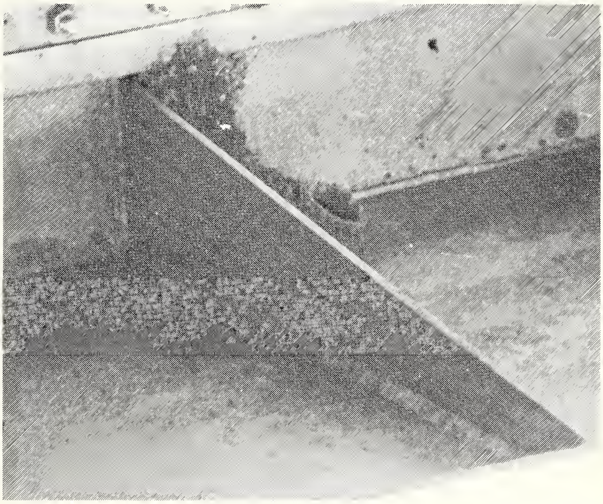
The activity in the colony was always at a furious pitch. Birds were continually going in and out of the nests, and always, there were one or two heads peering from them. By 16 July some young were out and perched in close proximity to the nests. Unfortunately, due to location of the nests, we were never able to get a count of the contents, nor could we, because of the noise of the water spilling from the sluices, even hear the young ones calling. On the 18th of July some immatures were flying with the adults over the river below the dam, and by the middle of August, all had left the colony.

An interesting adjunct to the Cliff Swallows were three pair of Rough-winged Swallows which nested inside the metal discharge pipes (inoperable at the time) and an Eastern Phoebe which had a nest on the bottom of a stop log.

All the personnel at the dam were most kind and helpful, and after recovering from their initial reaction that we must all be a little crazy, even allowed us to poke about the generators themselves in hopes of getting a better look at the nests. They became quite interested in the swallows and solicitous of their welfare. They promised to let us know the minute the birds return to the dam next spring.

207 Brown Road
Anderson, South Carolina
8 September 1965

The Cliff Swallow nest shown at right was built on a stop log at Hartwell Dam in South Carolina. (Photo by Jay Shuler.)



CONSERVATION

SAVING RARE BIRDS

Gladys Buckner

"Can Society, whether through sheer wantonness or callous neglect, permit the extinction of something beautiful or grand in nature without risking extinction of something beautiful and grand in its own character?"*

The July-August 1965 issue of *Audubon Magazine* in an article entitled, "The Day We Rescued a Whooping Crane," by N.S. Novakowski states that the Whooping Crane population at the time of the flight northward this past spring stood at 50 birds of which number 42 were in the wild. It might be of interest to review some of the facts about the eight birds now in captivity. Seven of these captive birds are in the Audubon Park Zoo, New Orleans, four of which were hatched and reared at the Zoo. The eighth bird is the yearling, Canus, now at the Monte Vista Research Station, Colorado, under the watchful care of Eugene Knoder of the United States Bureau of Sport Fisheries and Wildlife.

There are four male Whoopers and three females at the Audubon Park Zoo. The males are Crip and his three sons, Pepper, George I, and George II. The females are Josephine, Peewee, the daughter of Josephine and Crip, and Rosie. Rosie was found in Texas with a broken wing in 1956. She was helped to recover at the San Antonio Zoo and brought to the Audubon Park Zoo in 1964.

The shy birds are kept in amply large wired enclosures, a fenced area within a larger fenced area so that spectators cannot get too close. A 24-hour watch is kept on them. Leo Buras, the Bird Man of Audubon Park, on duty from eight to ten hours each day, is their special attendant.

The cranes are fed three times daily a diet of soft shell crab, shrimp, fish tenderloin, and horse meat with the meat rolled in multi-vitamin supplement and trace mineral mixture. In addition they are fed some grain as well as Purina pellets especially prepared for game birds. The pellets are kept before them all the time. The birds eat much meat and sometimes catch sparrows which they kill, wash, and eat. They have a habit of washing everything they eat except the grain and pellets.

To watch these birds is like looking at some rare and precious gem. One mentally checks facts about them: They are the tallest native North American birds; they stand 5 feet tall, and have a wingspread of 7 feet. The plumage is white except for black wing tips, but the black is inconspicuous unless the wings are outspread. The eyes are bright yellow and the strawberry red cushion on the head is bare skin as is the suggestion of red about the upper part of the bill. A gray-black feather arrow points downward from the crown of the head and the upper mandible of the heavy, dark bill is partially serrated, yet, according to those closely associated with them, the claws are more formidable than the saw bill. They weigh from 15 to 25 pounds, and there is little dif-

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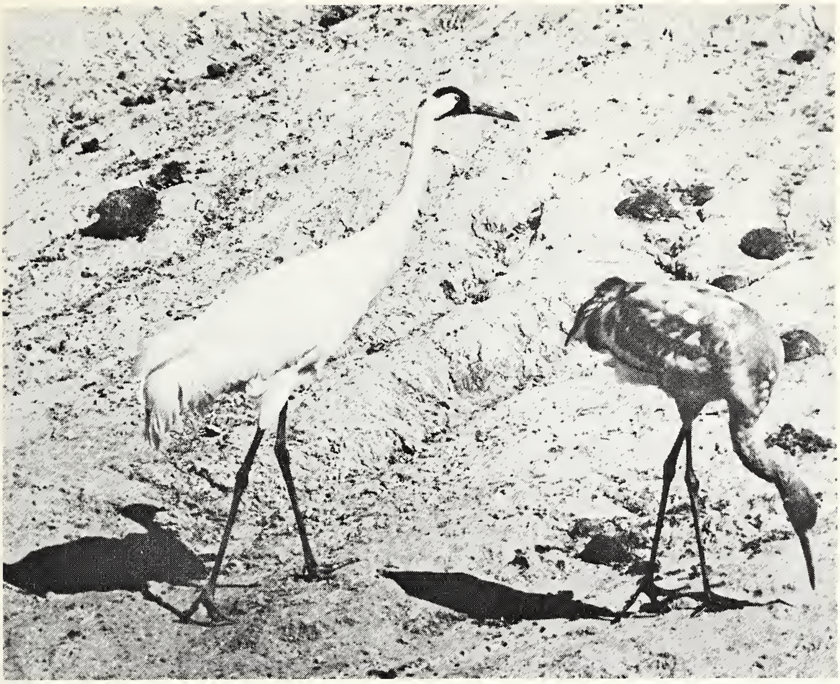
*From ON THE TRAIL OF VANISHING BIRDS by Robert Porter Allen. © 1957 by Robert Porter Allen. Used by permission of McGraw-Hill Book Co.



A Whooping Crane adult and young of the year (right) were photographed at the Aransas National Wildlife Refuge in Texas. (Photo by Luther Goldman, U.S. Department of the Interior, Fish and Wildlife Service.)

ference in the size of the male and female. They have a piercing, bugle-like call which is emitted through a windpipe that is curled within the breastbone like the coils of a French horn. They sleep standing on one foot. The process of molting the primaries is accomplished within a period of 30 hours. Within three to four weeks the new coat of feathers has grown, but during the period of molt the birds are unable to fly.

Josephine, native to the Louisiana marshlands and a casualty of a 1939 hurricane, was taken in an injured state to the Audubon Park Zoo where she has lived ever since except for a three-year stay, from 1948-1951, at the Aransas Wildlife Refuge.

Crip, Josephine's second mate since she has been in captivity, was a casualty found at Aransas and has been her mate since 1949. While they have only four living progeny, they have lost nine chicks, two from aspergillosis, an air borne fungus infection of the lungs that usually attacks the young at the age of two or three months. Mortality among the young birds is high, especially during wet summers, but experience has proved that once the wild birds reach breeding age they are likely to survive. This may not be true of captive birds, though the nine chicks that died were all less than 45 days old.

A United States Department of the Interior release states that wild Whoopers hatch no more than two eggs a year and that usually only one of the young cranes will survive to reach the wintering grounds in Texas. In view of the uncertainty of the population increase and in the hope of preserving the species, the U.S. Department of the Interior in conjunction with the Canadian Wildlife Service issued on 12 May 1964 a proposal which was submitted for review and comment to several conservation groups which have an active interest in Whooping Cranes. This proposal calls for the taking of a maximum of six eggs from only three nests of the wild birds in any one year. The eggs would be taken only in wet years when the mortality of the young birds is high. The young from these eggs, hatched and reared in captivity, would eventually be released to the wild.

The knowledge of Whooping Cranes gained from the captive group at the New Orleans Zoo together with the success in hatching and rearing in captivity the closely related Sandhill Crane, may make the Canadian-American proposal regarding the perpetuation of the Whooping Crane a practical one. The Whooping Crane Status Report, 1938-1965, compiled by the Whooping Crane Conservation Association indicates that this Association has given its approval to the proposal. Their statement is as follows: "This proposal conforms to the recommendations of the Whooping Crane Conservation Association, and is believed to be the only hope for perpetuating this species."

On Easter Sunday, 1965, at the Audubon Park Zoo, these rare birds had many interested observers. It was noticed that one of the birds was sitting on a mound of straw in one of the wired enclosures. Later New Orleans television and newspaper announcements made known to the public that the nesting bird was Josephine and that she had produced an egg on Easter afternoon.

Since then it has been learned from Eugene Knoder, Research Biologist of the Bureau of Sport Fisheries and Wildlife, that Josephine has producd a total of three eggs this year. Each of the three eggs was immediately removed and incubated by a bantam hen. The first two eggs proved infertile. The third egg was fertile but the embryo died from unknown causes a few days before hatching. The other two pairs of Whooping Cranes at the Zoo did not reproduce this year, and so there has been no production of young by the captive Whoopers in 1965.

A memorandum to the Whooper Club of North America dated 20 August 1965 released by the Canadian Wildlife Service forecasts that the increase of the wild Whoopers will likely be smaller than last year and may be no more than five young.

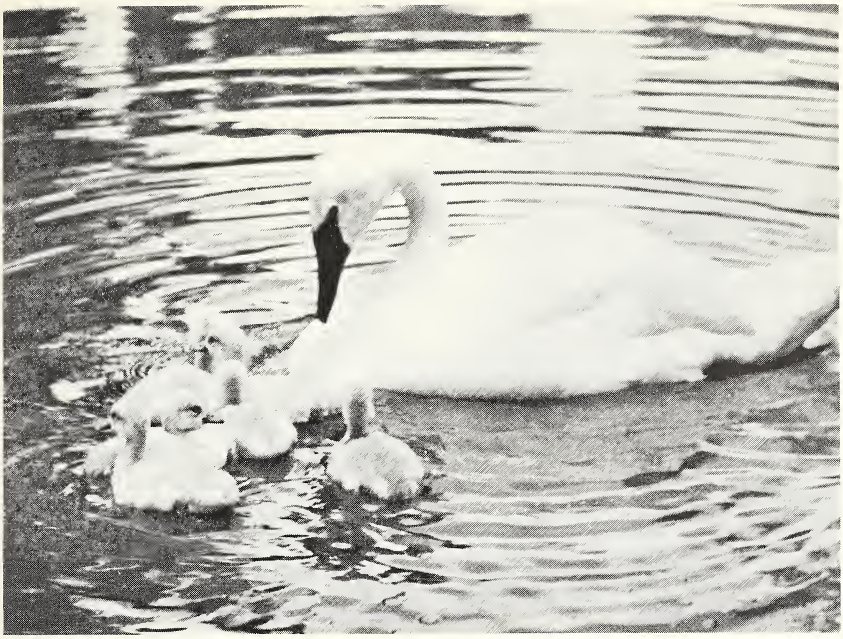
Since the foregoing story was written, it has been learned that Josephine has died. She apparently was unable to withstand the disturbance around her pen created by the necessary clearing of debris following the hurricane, Betsy. Just as her advent into captivity was an aftermath of a hurricane, so her death was coincidental with a devastating storm.

Trumpeter Swans—A Success Story

In contrast to the failure of the captive Whooping Crane population to increase this year, the increase of the captive Trumpeter Swans has been encouraging.

The Trumpeter Swan, largest of North American waterfowl, was considered in 1900 a nearly extinct species in the United States. However, because of protective Federal and State laws enacted in 1918 and due to the efforts of the Interior Department's Bureau of Sport Fisheries and Wildlife, this rare species is making a comeback.

In early August 1965 the Department of the Interior reported that Trumpeter Swans in captivity have produced young in the United States for the first time in more than 100 years. Two widely separated zoos reported a total of 11 Trumpeter cygnets—five at America's oldest zoo, the Philadelphia Zoological Gardens, and six at the Great Bend (Kansas) City Park. Two of the five cygnets at the Philadelphia Zoo were hatched in an incubator in early July.



The brood of six cygnets shown above with an adult Trumpeter Swan were produced on Great Bend City Park pool, Great Bend, Kansas. This brood and another of five cygnets hatched at the Philadelphia Zoological Gardens are the first young of this species produced in captivity in the United States in more than 100 years. (U.S. Dept. of the Interior, Fish and Wildlife Service.)

All six of the Great Bend Park cygnets were hatched by the pen (female) on 28 and 29 June.

The Trumpeter Swan was once an abundant and widespread species in North America with breeding grounds from Alaska to Missouri and eastward to Indiana and Wisconsin. They were known to winter in the Chesapeake Bay area, in Texas coastal estuaries, and along the Columbia River in Washington and Oregon.

In the early 1930s Government biologists working in the vicinity of Yellowstone National Park discovered 33 of the rare birds. This discovery led to the establishment of the Red Rock Lakes National Wildlife Refuge in that area in 1935. Since that time the species has made a remarkable recovery.

Through transplantation Trumpeter Swan populations have been established in National Refuges in Oregon, Nevada, Wyoming, and South Dakota. [According to the Department of the Interior, 15 Trumpeter Swan cygnets were produced in 1965 on the Lacreek National Wildlife Refuge in South Dakota, the only place east of the Rocky Mountains where the species is known to nest in the wild.—*Ed.*] In 1957 the Bureau of Sport Fisheries and Wildlife began lending Trumpeter Swans to selected zoos. It is now estimated that there are 700 to 750 of the birds in the wild south of the Canadian border and that they produce more than 100 young annually.

The success in saving the Trumpeter Swan from extinction has encouraged Federal and State governments to try to preserve other endangered or rare species of American wildlife for the benefit of future generations.

Backyard Birding

Annie Rivers Faver
Department Editor

AEROSPACE SAFETY

Airplanes vs. Birds

While Shaw Air Force Base is not exactly in my backyard, it is just across the river from my home and the planes frequently fly over our hillside. This made me begin to wonder about the problem of airplanes and what a hazard they formed to migrating birds and vice versa. So when an invitation came from Captain Virginia Yates to come to lunch at the Officers' Club and meet some flying birders, I was delighted to accept. I put my question to the Safety Officer and was told that there certainly were occasions of bird strikes. From January through July 1965, 41 planes had encountered birds at an altitude of from 500 to 3,000 feet. One pilot was forced to land in wing formation with another aircraft when the blood and flesh of a bird covered his windshield. Another plane had men in the cargo compartment receive head and foot injuries when the pilot pulled into a steep climb to avoid a large bird.

From the experiences of the past seven months, Col. Andrew F. Gordon, Director of Safety, issued the following information:

"The avoidance of birds, once they are sighted at close range, appears to be more dangerous than continuing the original flight pattern.

"Flocks of sea gulls and individual buzzards or storks are inflicting the most damage to our aircraft.

"Ingestion of a flock of small birds or one large bird normally causes a compressor stall in jet engines.

"Birds flying at dusk are the most difficult to see."

Individual units have taken the following actions as a result of bird strikes:

"a. All pilots briefed to fly with their helmet visors down, when flight is close to ground.

"b. Low-level flights are not scheduled during the early morning or early evening hours, when flocks are most apt to be flying.

"c. Control tower personnel and all aircrews taxiing or flying will maintain a current crosstell on birds noticed in the airport vicinity."

[A "crosstell" means the carrying on of a conversation between the signal tower and planes that are moving about on the runways. Thus incoming planes may be warned of birds in an effort to avoid a collision.—*Dept. Ed.*]

An article in the Safety Magazine of the United States Air Force gave a bird's view of the problem. This particular bird happened to be a pelican which ran into difficulties with the USAF as he was calmly flying down the coast. I quote the pelican:

"Boy, have I got a splitting headache! I was flying down the coast when, with no warning, some idiot fired this big shell at me. It must have been 100 feet long. It was spewing fire from the tail and my ears still ring from the thunder it made. I did a violent 90 and it missed, but it like to have scared me to death.

"Now, the only reason I can see for them shooting at me is that men seem to think we birds are always trying to fly into their airplanes. I've seen some of their reports—broken windshields, dented wings, torn up engine turbines, smashed landing lights—and they are all written like it was our fault. Ever stop to think of what happens to us birds? Brrrrr, if that thing had hit me this morning!

"It ain't fair, really! A bird hatches, eats things, grows, flies around, drops things, eventually he dies. No problem to anybody, really. But you men keep bothering us. You have burned rubber tires near our roosting places, you have fired cannons to try to scare us away, you have cut down some excellent roosting trees near airbases and drained some of our favorite swamps. So . . . o . . . o while I soak my singed feathers, how about a truce?"

Poor Mr. Pelican, he should turn inland and visit Shaw Air Base. I'm sure he would be treated with more consideration.—ARF

An Outdoor Grill—Strictly for the Birds

Some years ago snow fell before we put the portable outdoor grill in storage for the winter. Parked on the open back porch, the grill was much easier to reach and better protected from the wind than the post feeder; so I tossed some bread crumbs and sunflower seeds into it. From then on the grill was used for barbecues in the summer and as an extra feeder in the winter. Sometimes we added a stump or a branch of a tree and photographed the birds which visited the grill-feeder. Two feet in diameter and about three inches deep, well drained by holes rusted in the bottom, the grill (with the cooking top removed) was an ideal feeder when there were large flocks of Evening Grosbeaks or Purple Finches. Once we counted 30 grosbeaks on it at the same time.

The dilapidated old grill became a year-round feeder two years ago after a new one was purchased for cooking. Soon the birds took possession of the new grill, too. If I do not clean the grill top immediately after a cookout, Catbirds pick off the tasty morsels of fat and chicken skin. Once a Catbird attempted to alight upon the still very hot cooking surface while the family sat only a few feet away—busily eating chicken barbecue.

Last spring the grill-feeder finally collapsed. In its place on the back porch, just outside the dining area window, stood the new grill with a thin layer of charcoal and hickory chip ashes covering its bottom. While Jack and I were eating lunch on August 26, I heard an unfamiliar noise coming from the porch. Looking out the window, I saw a Carolina Wren dusting in the grill. The bird, apparently a juvenile, would crouch, fluff its feathers, and flutter in the same manner I have seen House Sparrows dust hundreds of times. Occasionally the bird paused to peer nervously over the edge of the grill. Bits of unburned charcoal seemed to bother the wren, and it used its bill to push them out of the way, eventually forming a neat S pattern with them. The wren moved about a good deal while dusting, going completely around the grill several times. Obviously this was necessary because the bed of ashes was very shallow; after only one or two dusting treatments, the bare metal grill bottom was exposed. Nine minutes after we first noticed the bird's behavior, the wren perched on the rim of the grill, compressed its feathers (sending out a cloud of dust), and flew away. Although the grill remained unused and in the same location for a week after this performance, we did not observe any further dusting activity; and the S pattern of charcoal bits remained undisturbed.

As winter approaches I'm wondering whether we should turn the new grill into a feeder or try to build a wooden feeder with the dimensions of a portable grill. Certainly we must do one or the other, because we have never had any other feeder as popular as that wobbly, rusty old grill!—ELOISE POTTER, Zebulon, N.C., September 15, 1965.

From the Log of Critter Rest

16 August 1965. At the dock this afternoon. Fishing was too slow and I put aside the tackle and sat back with my glasses. We are but eight air-miles from a large breeding colony of Royal Terns and for days there had been a passage of big terns both ways along our creek but there had been little diving. The birds flew low and I amused myself by watching to see if fortune might bring a Caspian Tern among them. It wasn't my afternoon. Some of the bills seemed red enough and many of the tails seemed shallow-notched, but that isn't enough when young birds are a-wing. All Royals, I thought.

19 October 1965. Last week I put up a new feeder—a "John Myers" type (a roofed double-decker), generously donated by Mary May. It is cleverly designed to keep out squirrels and unwanted birds. But cage trappings are foreign to our yard birds and they stayed away in droves. Impatient, I cut away most of the guard this morning and added some fresh goodies and sat back—but not for long. At 4:15 PM, cloudy, drizzly, and mild, I looked out and saw an oversized raccoon inside the feeder on the top floor. He was eating away and I did not know whether he had dropped onto the roof from overhanging oak limbs or had climbed the 5 feet of ¾ inch pipe that supported it. And I did not find out. At 6:30, with the food all gone, he casually pulled his tail in under him and, as well as I could see in the near dark, put his head, forehead down, between his paws and went to sleep!

20 October. 6:30 AM. Another rainy day. The 'coon is gone. How had he reached the feeder? I put out fresh food and was surprised with a mid-day visit. At 12:35 he was under the feeder. He picked up some crumbs with his "hands" and ate them and deliberately drew his "fingers" through the wet grass and walked over to the pipe and walked up it. It was so simple I wondered why I had wondered. I do not think his body touched the pipe. He easily wrapped his long toes around the small pipe. Near the top he reached out with his right "hand" to grasp the projecting base, but he couldn't hang on and his whole body slid down about a foot. Back up, he succeeded on the second try and pulled himself up and on to the top deck of the feeder. A quarter of apple, half a slice of peanut-buttered bread and several cracked pecans later—at 2:00 PM—he came down the pole, head first and rather precipitiously, and walked away into the brush at the edge of the pond. A bit huffy, I thought. The fare was poor for a flesh eater.-B.R. CHAMBERLAIN, Wadmalaw Island, S.C.

General Field Notes

Department Editor: B. Rhett Chamberlain, Wadmalaw Island, South Carolina
Advisory Council: E. Burnham Chamberlain, Thomas W. Simpson, M.D., Wendell P. Smith, Ivan R. Tomkins, Robert L. Wolff.

This department will carry noteworthy data to the extent of the allotted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal deadline for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Observations at an Impounded Salt Marsh Area.—The public health authorities in Pamlico County, North Carolina, have recently begun a project to control mosquitos by impounding salt marshes in which certain species breed. This is being attempted by encircling large acreages of marsh by dikes with the idea of maintaining a constant minimum water level (aided by pumping stations) which will interrupt the mosquito's life cycle. Assuming that these impoundments withstand hurricane tides, there will, within several years, evolve an entirely different biological community. Not least affected will be the local bird population(s).

On 10 August 1965 I visited one of these areas near the mouth of Bay River, bordering Pamlico Sound. The numbers and variety of birds seen were quite impressive—especially in contrast to adjacent areas of unflooded marsh.

Among the more interesting observations were: an apparent family group of Pied-billed Grebes with two of the birds in immature plumage—possibly adding Pamlico to the recorded counties of North Carolina in which this species breeds; Least Bittern, 6 individuals; 2 White Ibis; approximately 175 Black Ducks, said by local people to have bred in large numbers this year; 3 immature American Widgeon, on a considerably earlier date than this species is due to arrive from the North; a lone Marsh Hawk; a Dowitcher; 2 Stilt Sandpipers, one retaining its breeding plumage, feeding in the company of both species of Yellowlegs and Pectoral Sandpipers; about 200 each of Laughing Gulls and Royal Terns—the two most common species seen; 10 Sandwich Terns; 2 Caspian Terns. Short-billed Marsh Wrens were common. Also, a Yellow Warbler was found—an unusual date for this easterly area; Seaside Sparrows were common; no Sharp-tailed Sparrows were seen. The remainder of the 48 species noted do not merit comment here.

In addition to reporting some interesting observations, outstanding among which was the Stilt Sandpiper, it is my purpose to point out to others interested in ornithology of coastal North Carolina, the existence of these marsh impoundments and the changing ecology which they will provide, though the area involved is not very extensive.—ROBERT P. HOLMES III, *306 Country Club Drive, New Bern, North Carolina, 24 August 1965.*

Shearwaters and Petrels off of Morehead City, North Carolina.—On 17 June 1965 I had the opportunity of observing birds while on a boat trip from Morehead City, North Carolina to a point about 20 miles east of Cape Lookout. In addition to the usual gulls, terns, etc., three species noted seem worthy of comment.

From about 10 to 20 miles offshore one was able to see from one to five shearwaters at all times. These individuals were approximately equally divided between Sooty and Greater Shearwaters. No Audubon's or Cory's Shearwaters were seen. I had previously seen all but the Cory's Shearwater in these waters, but never in such numbers.

It would seem reasonable to conclude that the birds seen, in large part, represented migrants rather than a summer population. The presence of the Sooty Shearwater and the failure of the Audubon's Shearwater to have arrived in mid-June is in keeping with the recorded observations for these species in the *Birds of North Carolina,* Pearson, Brimley and Brimley. This would seem to be a fairly early date for the Greater Shearwater, but judging from the number of birds seen and the dearth of reports dealing with the *Procellariidae,* this may well be a representative spring date.

Finally, Wilson's Petrels were in sight most of the day from about 3 miles offshore to the extent of the trip.—ROBERT P. HOLMES III, *306 Country Club Drive, New Bern, North Carolina, 24 August 1965.*

Roseate Spoonbill at Bodie Island, North Carolina.—At about 7:30 AM, 7 June 1965, my wife and I sighted a Roseate Spoonbill (*Ajaia ajaja*) wading in a small pool approximately 100 yards west of the express road on Bodie Island, about 5 miles north of Oregon Inlet, North Carolina. The bird was in the company of a small number of Snowy Egrets and Glossy Ibis—perhaps a total of 25 birds.

There was no mistaking the Roseate Spoonbill as we observed it for approximately 5 minutes engaged in its characteristic maneuver of swinging its bill in an arc of probably 150° while feeding.

We telephoned the Chief Naturalist (Bruce W. Black) at the National Park Service. Later he reported that he had not found the spoonbill but that a Blue Ridge Ranger had seen it on 8 June. We were on Bodie Island on 8 June but did not see the spoonbill that day.—S. H. THORNTON, *3405 Greenway, Baltimore, Maryland 21218, 2 September 1965.* [Correspondence with Mr. Black added the information that the Blue Ridge Ranger, Albert E. Werking, his wife and another companion had seen the spoonbill on 8 June at a location closer to Manteo than the pond where the Thorntons had found it. Mr. Black also stated that a spoonbill—presumably the same bird—was seen on the pond east of the Bodie Island Lighthouse on 23 August. The observers were Seasonal Naturalist Bob Smith and Paul W. Sykes Jr.—*Dept. Ed.*]

Banding off Beaufort, North Carolina.—On 13 June John Thompson explored the islands inside Cape Lookout, most of which were originally open sands from dredge spoils, but which have now become covered with low vegetation. This change in ecology has affected the nesting populations, leaving little favorable place for terns and skimmers which formerly nested in abundance, their place having been taken by Laughing Gulls who like to hide their nests among the grasses. Thompson estimated 50 pair of Black Skimmers nesting, two or three with nests having young, but most of the eggs had not hatched. He also saw a few American Oystercatchers, Wilson's Plover, Least Terns, and

Gull-billed Terns, but did not search for their nests. On 2 July seven banders were able to band 238 Laughing Gulls, but only 32 Black Skimmers, on these islands.

The banders moved over toward Ocracoke, and on 4 July Raymond Styron of Cedar Island took them out to Shell Castle Island, a few miles north and east of Ocracoke Inlet, where banding has been done in previous years. Here the Brown Pelicans had as usual beaten down the tall grass and built up nests thereon, instead of on the bare part of the island. The observers counted 70 adult pelicans on the site at one time, and assumed as many more to be off fishing to feed the young birds. Young were in a variety of stages: 77 fledgeling young were banded, many of which were swimming in deep water, but unable to fly; two young were still in the white downy stage; while seven were in the black, or naked, stage freshly hatched. Only five eggs were found that did not hatch. This raises an interesting question as to the effect of poison sprays upon the fertility of pelicans as compared to Bald Eagles and Ospreys—of which we are hearing so much. In 1958 we banded 72 young pelicans at the same place, and in 1960 we banded 85.

On Shell Castle Island they banded 686 young Royal Terns (and estimated another 400 unbanded) and 69 Sandwich Terns. These were taken by using poultry wire as a corral into which the young birds were driven, being careful to pen small numbers at one time so the birds did not trample and smother one another.

The commercial fisheries men had planted thousands of bushels of old oyster shells around the island, with new ridges of shells accumulating up to 3 feet above high tide. These had accumulated since 1961. Examination of these shells showed they were clean halves that had evidently been opened for their meat; a suggestion as to the fate of some shells planted to catch spat.

The banding group was made up of John Thompson, Harry Davis, J. D. Kane, Mark Thompson, Mike Browne, Tommy Wade, and John Fussell.—JOHN GREY, *Box 445, Williamsburg, Virginia 23185, 20 September 1965.*

Greater Scaup Added to Savannah River Plant Area List.—Two specimens of the Greater Scaup (*Aythya marila*) have been collected on Par Pond on the AEC Savannah River Plant area near Aiken, South Carolina. Par Pond, a large artificial lake constructed to provide water for plant operations, is located in Barnwell County, South Carolina.

The first specimen was collected by Richard L. Payne in a cove on the eastern prong of the lake between the first and sixth of January 1964, the exact date not being recorded. Measurements were taken on the bird and a study skin made. The specimen was identified by Ernest E. Provost, and the skin is now in his personal collection. The bird was an adult male in full nuptial plumage, weighing approximately 900 g, an average weight for this species (Kortright, 1942).

The second specimen was collected by Michael R. Pelton in a shallow sheltered cove on the western prong of the lake at 5:00 PM on 6 June 1965. I identified this bird as being of this species by the greenish gloss to the head, the inner primaries being white, and the measurement of the greatest width of the bill (2.7 cm). This bird was also a male, still in full nuptial plumage. It had an adult penis and the bursa was absent, but these characteristics may be possessed by a yearling bird in this species, as the adult penis is believed to be always assumed during the first winter or spring and the bursa cannot be relied upon to distinguish immature birds from adults after the end of December. In addition, males assume adult plumage the first spring after hatching (Mosby, 1963). Measurements taken were: length, 45.7 cm; extent, 78.3 cm; wing, 21.4 cm; tail, 5.9 cm; bill, 4.9 cm; width of rostral nail, 8.0 mm; tarsus, 4.9 cm; weight, 686.1 g. The length and extent measurements indicate a slightly smaller than average bird (Kortright, 1942). The weight is probably somewhat lower than it should be as the specimen was weighed at some length after death. Several of the inner primaries of the left wing were damaged and appeared to have been broken off in some manner, apparently rendering the bird flightless. It was thought to be in this condition when first observed by Mr. Pelton.

The Greater Scaup does not appear on fresh water to any great extent in South Carolina, and many of these birds are merely passing through the area. Sprunt and Chamberlain (1949) state that it seldom visits fresh water, preferring the large bays, estuaries, and the ocean itself. Its status is that of a rare winter resident. Burleigh (1958) says that the Greater Scaup is apparently a rare and rather local winter resident in the eastern edge of Georgia; authentic records of its occurrence being very few in number. Murphey (1937) found it "never very abundant" at Augusta; several specimens were taken there. Norris (1963), whose extensive notes cover a period from the late summer of 1955 to the fall of 1962, does not record an observation of the Greater Scaup on the Savannah River Plant. These specimens thus constitute an addition to that list. The fact that one specimen was secured on 6 June is not surprising, as Sprunt and Chamberlain (1949) state that an occasional specimen may be seen in early summer, although most are gone by early April. Perhaps many of these late stragglers may be injured in some manner as was this specimen. The Greater Scaup may be more common on the area than supposed, as it is almost impossible to distinguish between this species and the more common Lesser Scaup in the field.

I thank Richard L. Payne, Michael R. Pelton, and Ernest E. Provost of the School of Forestry, The University of Georgia, for their full cooperation and permission to submit this note. This research was supported by McIntire-Stennis Grant 12.—JOSEPH R. FATORA, *School of Forestry and Institute of Radiation Ecology, The University of Georgia, Athens, Georgia, 27 September 1965.*

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Red-breasted Merganser Observed on Savannah River Plant—On 20 January 1965 a Red-breasted Merganser (*Mergus serrator*) was observed on Par Pond on the AEC Savannah River Plant area near Aiken, South Carolina. Par Pond, a large artificial lake constructed to provide water for plant operations, is located in Barnwell County. The observation was made on the western prong of the lake in a shallow sheltered cove. This bird was watched for several minutes at a distance of approximately 100 yards through 7 x 35 binoculars, being sighted with 50 Ring-necked Ducks, 12 Buffleheads, 10 Mallards, 1 American Widgeon, 3 Ruddy Ducks, 75 American Coots, 1 Pied-billed Grebe, and 1 Horned Grebe.

Judging from the plumage, this particular individual was believed to be a juvenal male. Burleigh (*Georgia Birds,* University of Oklahoma Press, 1958) has made the observation that most of the Red-breasted Mergansers that reach the Southern states during the winter months are females and immature males, the adult males apparently preferring to remain farther north. Another individual thought to be of this species was observed on Par Pond, but positive identification was not secured in that instance.

During the fall and winter of 1964-1965, countless hours were spent by the author checking the waterfowl of the Savannah River Plant area. The sighting described herein was the only one personally observed. In a later conversation with John B. Hatcher, Forest Manager of the Savannah River Plant, it was learned that an injured Red-breasted Merganser was captured on a powerline service road through bottomland hardwoods and pine plantations on the lower terraces near the Savannah River sometime during the month of April 1965. The exact date was not recorded. This bird was a mature male in full nuptial plumage. Mr. Hatcher photographed the bird and later released it near Forest Service headquarters. These are apparently the only two records of the species on the area last winter.

As far as can be determined, these have been the only Red-breasted Mergansers recorded in this part of the State since 1937 when Murphey (*Observations on the Bird Life of the Middle Savannah Valley 1890-1937,* Charleston Museum Contribution No. 9, 1937) recorded the species as occasional in winter on the Savannah River bordering Aiken County. The paucity of records other than coastwise of this bird which is normally maritime in winter can be realized from the statement of Sprunt and Chamberlain (*South Carolina Bird Life,* Charleston Museum Contribution No. 11, 1949) that this was apparently the only definite inland record. Norris (*Birds of the AEC Savannah River Plant Area,* Charleston Museum Contribution No. 14, 1963) whose extensive notes covered a period from 1955 to the fall of 1962, does not record this species on the Savannah River Plant area. These observations thus constitute an addition to the species list of the area.

It may be of interest to note here also another record of the Red-breasted Merganser near the Savannah River. On 29 March 1965 between 8:30 and 9:00 AM, Michael and Andrea Deuver of the Department of Zoology of the University of Georgia captured an injured bird at the side of the road in the vicinity of Clark Hill Reservoir on the Georgia side of the Savannah River. The bird was first seen in the grass along the road, and although it was unable to fly, it was captured only after a chase. The road was blacktopped, and was slick and wet from preceding rain. The merganser evidently mistook the shiny, wet-surfaced road for a body of water as often happens with waterbirds under such circumstances. This bird was also a mature male in full nuptial plumage. It was carried to the Savannah River Plant where it was subsequently released near Forest Service headquarters. This research was supported by McIntire-Stennis Grant 12.—JOSEPH R. FATORA, *School of Forestry and Institute of Radiation Ecology, The University of Georgia, Athens, Georgia, 24 September 1965.*

Long-billed Curlew at Carolina Beach, North Carolina.—On the morning of 17 July 1965, Polly Mebane, Dot Earle, Catherine Alexander, Bud Needham, and the writer were birding on the tidal flats of the north end of Carolina Beach, when we noticed a fairly large, brownish bird standing alone and preening itself. As we watched, the bird turned from side to side, showing a very long, almost needle-like, decurved bill. In order to be positive of identification we moved closer to the bird. As we approached, the bird lifted the wings high over the back and held them there long enough for the cinnamon linings to be observed clearly. There was no observable evidence of any head-striping. While we watched, two Whimbrels (*Numenius phaeopus*) flew in and began feeding close by. With these for comparison as to size, bill length, color, and other markings, there was no doubt that the bird which we had been watching was a Long-billed Curlew (*N. americanus*).

The Chat records four appearances of the Long-billed Curlew on the North Carolina coast; four on the South Carolina coast; and one near the mouth of the Savannah River on the Georgia coast. The Georgia bird was collected. One wintered at the Cape Romain Refuge and was not seen after the third week of March. The observations include all months except April and October. *Chat* references: **17**:50 and 94, 1953; **20**:42, 1956; **23**:65, 1959; **24**:65, 1960; **25**:96, 1961; **27**:82, 1963; and **28**:135, 1964.—FRANCES B. NEEDHAM, *North Carolina State University, Department of Zoology, Raleigh, North Carolina, 1 August 1965.*

Saw-whet Owls in Jackson County, North Carolina.—In *Notes on the Birds of the Great Smoky Mountains National Park* (1963), Arthur Stupka lists the Saw-whet Owl (*Aegolius acadicus*) as "an uncommon permanent resident in the spruce-fir forests of the Great Smoky Mountains National Park" and notes that "no nest, eggs, or young birds" have been recorded. Thomas Savage (*Migrant*, 36:15-16) has recently added a number of observations to those given by Stupka, but Savage terms the status of the Saw-whet Owl "not substantially changed," although he lists "eight known calling stations" in the Park. Except for a calling station found at Walker Prong (Tennessee, 4,100 feet), the Saw-whet Owl of the Southern Appalachians has been thought restricted to a breeding area along the crest of the Smokies. My observations in Jackson and Haywood Counties, North Carolina, during the spring and summer of 1965, offer evidence that the southern breeding population of the Saw-whet Owl is not limited to the Smokies.

On 3 May 1965 my young son and I were calling owls at 7:00 PM on the crest of Richland Balsam on the Blue Ridge Parkway (over 6,500 feet). After about 10 minutes we were answered by characteristic Saw-whet *whooing* from the Haywood County side of Richland Balsam. On 10 July 1965 I made an early-morning trip to Richland Balsam. Arriving a little before sunrise, I found Richland Balsam and the surrounding area enveloped in mist. An area of good visibility remained around the Richland Balsam Overlook (over 6,000 feet) and extended approximately 100 yards in all directions. While walking along the highway, I began giving owl calls, and at 5:30 AM I heard a soft, high-pitched cry behind me. I turned and saw a bird flying rapidly toward me. At first I thought it a grouse, but then the undulating flight of the bird reminded me of a woodcock. As the bird neared me, I recognized a small owl. The bird flew by me at a distance no greater than 15 feet, giving me a good view of the bird with my unaided eyes, and then veered off down the road and back into the mist-shrouded balsam forest. The front of the bird, both head and underparts, was a dark, solid brown. The back of the head, the back, and the short tail of the bird were a much lighter brown and showed faint striping. Throughout the morning I heard high-pitched cries in the area, and these may have been the *sawing* call attributed to the species. Evidently the bird that I sighted was an immature Saw-whet Owl in the first stages of molting its juvenile plumage; I therefore offer this record as evidence of the Saw-whet Owl's breeding in the Southern Appalachians, and outside of the Smokies.

In the Richland Balsam area on 18 July 1965, at dusk, two Saw-whet Owls answered my calls, but on later trips I could obtain no response. With Savage's observations, my records offer evidence of a fairly well-established but restricted breeding population of Saw-whet Owls in the Southern Appalachians, and certainly someone should attempt a thorough study of this population. My records also support the theory of vertical migration advanced by Savage. I have low altitude records for the Saw-whet Owl from Jackson County for 26 October 1963 (calling record, Tuckaseigee, 2,000 feet), 22 March 1964 (sight record, Highway 107 near Round Mountain, 3,200 feet), and 10 April 1965 (calling record, Tennessee Creek, 3,800 feet). The last record is of particular interest. Together with D.I. Purser III and D.I. Purser IV, et al., I was calling owls about 9:30 PM, when we began to hear unusual owl sounds. Drawing closer to the birds, we heard two Saw-whet Owls calling in unison and separately, one bird about two octaves higher than the other. The birds gave the rapid *whooing* calls of the species for periods lasting as long as 1 minute and 20 seconds. Located in a small grove of hemlock, the birds were still calling when we departed an hour later. The Tennessee Creek area is immediately below the Blue Ridge Parkway, and these birds probably moved up to the spruce-fir forest during the next few weeks.—Richard H. Peake Jr., *342 Milledge Terrace, Athens, Georgia, 9 October 1965.*

Hummingbird Nest on a Cotton Stalk.—On 6 July 1965 Brown McCallum Sr. found the nest of a Ruby-throated Hummingbird with two eggs on a cotton stalk near the middle of a 25 acre cotton field at Dillon, South Carolina. The nest was placed about 2 feet above the ground. The field was bounded on two sides by woods and a ditch on one side from which the hummingbirds seemed to feed.

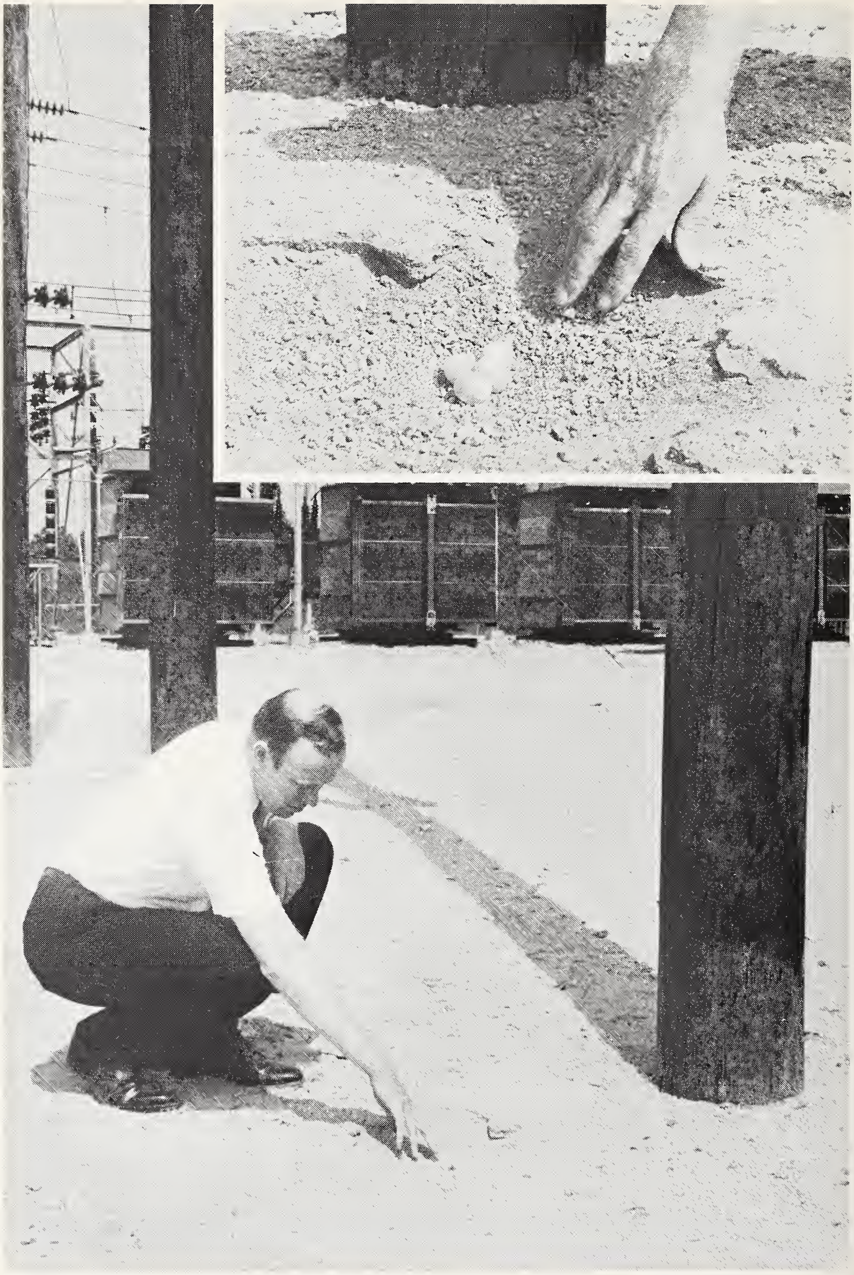
For the next two weeks he and his brother, Marion, covered the stalk and nest lightly with a plastic cover when the field had to be poisoned. Even though the nest was visited frequently for that purpose, the parent bird would always return as soon as the human moved to a safe distance.

The nest was covered on the outside with lichens and fitted the usual description of being the size of an English walnut half. On 21 July one of the eggs had hatched. The other did not hatch. On 30 July the accompanying photograph was taken by Brown McCallum Sr. At that time pin feathers were apparent on the little bird's back.

On 31 July, when visited again, the nest and contents had been completely destroyed and only a few wisps of the nest could be found on the ground. No tracks were found, and it was assumed an animal had destroyed it. This was a great disappointment to all of us.—Lois M. (Mrs. Marion R.) McCallum, *800 8th Avenue, Dillon, South Carolina, 26 September 1965.*

The Ruby-throated Hummingbird nest shown at right was placed about 2 feet above ground on a cotton stalk. (Photo by Brown McCallum Sr.)

Ground Nest of a Yellow-shafted Flicker.—An unusually situated nest of a Yellow-shafted Flicker (*Colaptes auratus*) was discovered in early May, 1965 in Wake County, North Carolina. My attention was directed to it by Clifford Story, Forester for Carolina Power and Light Company, Raleigh, N.C., who found the nest at the Milbournie sub-station, 10 miles east of Raleigh, near Crabtree Creek. The sub-station is located in an old abandoned field which is grown up in broom sedge and numerous small pines. The space within the fenced area is covered with a thick layer of sand and gravel to keep down vegetation. It is about 300 by 300 feet square. My first visit was on 31 May, at about 2:00 PM. The temperature was in the high 80s. Mr. Story and I observed the nest situated at the base of a power pole in a saucer-like scooped out depression.



Clifford Story is shown above examining the Yellow-shafted Flicker nest found on the sand and gravel covered grounds of Carolina Power & Light Company's Milbournie sub-station, Wake County, N.C. Inset in the upper right corner is a close-up of the unusual nest. (Photos courtesy of CP&L.)

There were 5 eggs present. We did not touch them and I asked him to keep watch and try to get pictures of the nest and, if possible, of the female on the nest. Fortunately he did see the female flicker on the nest a few days later.

The accompanying photographs show the nest in the sand and gravel after one of the eggs had disappeared. About a week after my visit I learned from Mr. Story that all of the eggs had disappeared and that the flicker had not been seen after that. I want to express my appreciation to the Carolina Power and Light Company for furnishing the photographs.—DAVID L. WRAY, *Division of Entomology, Dept. of Agriculture, Raleigh, North Carolina, 30 September 1965.* [Subsequent contact with Mr. Story revealed the fact that the eggs were found a "week or more" prior to Dr. Wray's visit. He described them as "translucent, almost transparent." This fits the description of fresh flicker eggs by Bent (*Life Histories of North American Woodpeckers,* 1939). This source also cites several records of ground nesting flickers and *Birds of America,* 1944, edited by Pearson, contains a photograph of six flicker eggs in a ground nest.—*Dept. Ed.*]

Red-cockaded Woodpeckers in Moore County, North Carolina.—On several afternoons between 25 May and 5 June 1965, Miss Mary Keller Wintyen and I covered the area between Southern Pines and Pinehurst, in Moore County, North Carolina, searching for Red-cockaded Woodpeckers (*Dendrocopos borealis*) and their nests. Our search also carried us a short way into the nearby Fort Bragg Army reservation. We found more than 112 nests on our trips but only one definitely had Red-cockaded Woodpeckers nesting in it. We saw 21 of the birds during the trips, including a young one being fed at the mouth of the active nest. Where the woodpeckers were not using the nest holes, other things were. Starlings and Red-bellied Woodpeckers inhabited one nest each, and Yellow-shafted Flickers and Red-headed Woodpeckers inhabited two nests each. Flying squirrels and honey bees made use of empty nests in two instances each. One flying squirrel nest was located 10 feet below the only active Red-cockaded nest found.

The nest holes ranged from a high of 50 feet to a low of 4 feet. The average height was approximately 23 feet. They were usually found in small groups, although single nests were also common. The greatest number of nests in one tree was five. A few of the nests looked very old, but most of them looked fresh. Sap was still running around about 90% of them. The birds were usually found feeding close to the nests. They fed almost exclusively on pines, but we found one feeding in a deciduous tree.

The Red-cockaded Woodpecker is found in this area the year around. Because of the fair number of birds seen and because of the fresh appearance of most of the nests, it seems that we were looking for them after the nesting had been completed. *South Carolina Bird Life* (Sprunt and Chamberlain, 1949) states that but one brood is raised in a season.—JAY CARTER, *P.O. Box 891, Southern Pines, North Carolina, 1 August 1965.*

Ravens Around Blowing Rock, North Carolina.—I want to report the following observations of Common Ravens at and near Blowing Rock, North Carolina during the summer of 1965. Although I have spent many summers at Blowing Rock, I had never seen a raven there before this summer. Apparently, it has always been possible to find ravens at Grandfather Mountain, some 20 miles from Blowing Rock and at an elevation of better than 5,000 feet. The elevation around Blowing Rock is in the order of 3,500 to 4,000 feet. I report the following definite observations:

20 June—Attracted by the call, we—Mrs. Gage and I—saw three ravens soaring over our house on Chestnut Hill. Two of them were very high but one was seen at a fairly low altitude.

14 August—One raven seen flying low over Blue Ridge Parkway at Sims' Creek, about 5 miles west of Blowing Rock. It was seen to perch in the top of a hemlock tree.

22 August—Four ravens flying low and circling over the Parkway about 4 miles north of Blowing Rock. Alexander and Margaret Sprunt were with us.

8 September—One raven circling over the Parkway at Thunder Hill, about 2 miles north of Blowing Rock.

9 September—One raven flying over our house at rather low altitude.

On several other occasions we heard the call note of a raven passing over as we sat in the yard or on the porch, but the bird was behind trees and gone before we could see it. Why this number of observations during the summer of 1965 and never before, I do not know.—Gaston Gage, *305 Edgewood Avenue, Clemson, South Carolina, 13 September 1965.*

Swainson's Warbler in Jackson County, North Carolina.—On 22 April 1965 I recorded a Swainson's Warbler (*Limnothlypis swainsonii*) singing near Cullowhee Gap, but subsequently was unable to locate the species in that part of Jackson County. However, on 31 May 1965 I recorded a Swainson's Warbler near the Silver Run Road, about 2 miles below Cashiers, in the Whitewater River drainage. Similar to the Toxaway River Gorge described by James Parnell (*Chat,* 29:1-2), this gorge area is a short distance from Highway 107 and is approximately 5 miles north of the area where J.B. Shuler (*Chat,* 26:75-76) observed a singing male on 19 and 30 May 1962. After crossing Silver Run at 6:30 AM and walking down a logging road parallel to the stream, I heard a Swainson's Warbler singing. Having just heard a Louisiana Waterthrush, I was easily able to detect the difference in the songs of these species. Spending half an hour following the bird and attempting to call it near me, I finally attracted it into a rhododendron thicket 3 yards from me. The light was poor, but the warbler's reddish-brown cap was apparent both to my unaided eyes and through binoculars. The bird's eye-stripe and its *lack* of other distinctive marks were also evident. After a few minutes, my movements scared the bird away, but it was still singing when I left the area at 9:00 AM. On 14 July 1965 I returned to the Silver Run area but could obtain no sighting of the Swainson's Warbler, although I heard at least *two* different birds of this species. With Shuler's records, these observations indicate a breeding population of the Swainson's Warbler in the Whitewater and Chatooga River drainages.—Richard H. Peake Jr., *342 Milledge Terrace, Athens, Georgia, 9 October 1965.*

Nocturnal Feeding Behavior of a House Sparrow.—A House Sparrow with a nest behind a large illuminated "letter" on the face of a building, was seen feeding its young on the night of 10 May 1965, at 9:03 PM. The nest was approximately 16 feet above the ground, and was well illuminated by the bulbs behind the sign's letters. The grounds of Cameron Village, Raleigh, North Carolina, where the nest was found, were also well lighted. During the day there had been spring showers in this area. The showers probably increased the number of earthworms at the surface of the soil, for the young were being fed earthworms exclusively. Insects were at a minimum that evening, probably due to the rains. The light might have prolonged the wakeful hours of the young and their soliciting behavior, as well. The light would also make it possible for the adult to see while away from the nest. These light factors plus the availability of food were probably enough to initiate this nocturnal feeding behavior and have it succeed. Below are the data from seven feeding-foraging excursions of one adult from one nest. (An effort was made to return on other nights, but circumstances prevented this.)

First noted at 9:03 PM		Duration of feeding (to nearest second)	Next foraging trip (to nearest 10 seconds)
1st		?	70 sec
2nd		15 sec	60 sec
3rd		18 sec	30 sec
4th		12 sec	50 sec
5th		30 sec	60 sec
6th		20 sec	120 sec
7th		20 sec	110 sec
	Total	115 sec	500 sec
	Mean	19.1 sec	71.4 sec (70 sec)

This feeding behavior lasted 13 minutes or until 9:16 PM. The observer remained until 9:23 PM, but no further trips were made by the adult.—FRED L. JOHNS, *Dept. of Zoology, North Carolina State University, Raleigh, North Carolina, 17 July 1965.*

Brown-headed Cowbird Egg Collected on the South Carolina Coast.—Discovery of the first Brown-headed Cowbird (*Molothrus ater*) egg reported in the South Carolina Lowcountry was made on 5 May 1965, at Dungannon Plantation near Hollywood, Charleston Co., South Carolina. Some details of the discovery follow:

On 28 April I found a White-eyed Vireo building a nest about 2 feet above the ground in a small gum tree in an area of mixed woods only 30 yards wide and situated between cut-over pineland and a swampy area.

On 5 May I returned with Roy Baker to check the nest and found one vireo egg and one cowbird egg. The vireo was not at the nest. The cowbird egg was removed, first to have tangible evidence of the record and, second to see if the rightful owner of the nest would continue to lay.

Four days later the female vireo was found on the nest, incubating but two eggs. This species usually lays three to four eggs to a clutch. No evidence could be found in the immediate vicinity that the cowbird had thrown vireo eggs out of the nest, as this bird does sometimes.

Two other records of cowbird eggs found in South Carolina have been reported in the past couple of years, but both were in the Piedmont (*Chat*, 28:97-98, 1964). One was in the nest of a Blue Grosbeak at Campobello, near the North Carolina line, and the other was found in a Wood Thrush nest at Clemson.

Some oologists—with tongue in cheek, I hope—have argued that the cowbird is a really ingenious parasite and is capable of laying an egg comparable in size to the egg of the species it victimizes. I can only say that the cowbird egg found in the Wood Thrush nest referred to above measures 23.5 mm x 16.5 mm (the thrush egg: 24.0 mm x 18.0 mm) and the cowbird egg from the vireo nest measures 20.5 mm x 15.0 mm (the vireo egg: 19.0 mm x 13.5 mm). Certainly, in these cases, the Brown-headed Cowbird eggs really are close to size to the eggs of the victims. Bent (*Life Histories of North American Blackbirds, Orioles, Tanagers, and Allies,* 1958) gives a range in size of 127 Brown-headed Cowbird eggs measured from 25.40 mm x 16.76 mm to 18.03 mm x 15.49 mm; the average being, 21.45 mm x 16.42 mm.—ERNEST A. CUTTS, *1466 S. Edgewater Drive, Charleston, South Carolina, 14 October 1965.* [Would it be idle to suggest that a first year cowbird might lay a smaller than average egg and seek a small victim?—*Dept. Ed.*]

Field Sparrow Nest at Abnormal Height.—On 1 May 1965, I watched for about 15 minutes a pair of Field Sparrows (*Spizella pusilla*) carry food to noisy young in a nest located in the terminal tuft of a loblolly pine at 3134 Edinburgh Drive, Augusta, Georgia. The nest was estimated to be 18 feet from the ground. The only indication that I find that such a height in the southern portion of its range may not be too unusual is the reference in *South Carolina Bird Life* (Sprunt and Chamberlain, 1949): "... W.M. Levi has found nests at Sumter (S.C.) as high as 10 feet above ground in the top tufts of young pines." It is also noteworthy that 1 May is an early date for young in the nest in this area.—Robert Overing, *119 Willow Lane, Decatur, Georgia, 18 July 1965.* [The location is but a few miles across the Savannah River from the South Carolina-Georgia boundary.—*Dept. Ed.*]

Briefs for the Files

Compiled by B.R. Chamberlain

(All dates 1965)

Pied-billed Grebe, 11 pairs nesting, 31 young counted, in a pond at Williston, Barnwell Co., S.C., summer of 1965, William Post Jr.

Audubon's Shearwater, 1, freshly dead on Garden City Beach, S.C., 25 July, William G. and Flodie Cobey.

Great Blue Heron, 1, passed fairly low overhead 5 miles SW of Asheville on Hwy 26, 5 September, Jean M. and Roy D. Hudson.

American Bittern, 1, Lake Wheeler area of Raleigh, N.C., 19 September, Mike Browne.

Glossy Ibis, 3 feeding on marsh meadow, Hilton Head Island, S.C., 5 August, Mrs. Caroline Newhall; 10 to 12 over Hwy 26, 60 miles NW of Charleston in Orangeburg County, 13 September, B.R. Chamberlain.

White Ibis, 4 immature at Greenview Farms pond, Raleigh, N.C., about 11 August, still present 21 August, R.J. Hader.

Mallard, nest with 8 eggs in Savannah River Plant area, Aiken, S.C., 4 May, J.B. Hatcher and William Post Jr.; female and 3 young in a "Carolina Bay" at Williston, Barnwell Co., S.C., 27 May, William Post Jr.

Bufflehead, 1 at Pea Island, N.C., 23 June, Roch C. Raible.

Mississippi Kite, 4 near Society Hill, Darlington Co., S.C., 7 August, Jackson M. Abbott.

Peregrine Falcon, 1 at Folly Beach, Charleston, S.C., 2 October, Mrs. Loyd Smith.

Common Snipe, 3 at Greenview Farms pond, Raleigh, N.C., 19 August, very early, R.J. Hader.

Upland Plover, 2 at site of Wright Brothers monument, Kitty Hawk, N.C., 15 August, Edmund LeGrand; 1 feeding in cornfield near Statesville, N.C., 4 and 9 September, Ronnie Underwood and Chip Shafer.

Great Black-backed Gull, 1 on the Outer Banks, Currituck Sound, N.C., 23 August, Ronnie Underwood.

Caspian Tern, 10 fishing in Catawba River near Charlotte, N.C., 10 August, field marks carefully checked, Flodie Cobey.

Common Nighthawk, about 100 in migration near Asheville, N.C., 5 September, Jean M. and Roy D. Hudson.

Horned Lark, nest and 4 eggs, Faculty Club grounds, Raleigh, N.C., 3 July, abandoned by 6 July possibly due to heavy rains, R.J. Hader.

Bank Swallow, 10 to 15 at Lakes Benson, Johnson and Wheeler, Raleigh, N.C., 6 July—quite early; 2 to 5 present to 17 July, R.J. Hader.

Common Raven, 2 or more, High Balsams, N.C., milepost 431 on Blue Ridge Pkwy, N.C., 24 August, Jean M. and Roy D. Hudson.

Hermit Thrush, 1 at Greenville, N.C., 10 April—last date, Edmund Welch.

Gray-cheeked Thrush, 1 at Summerville, S.C., 12 September; 1 collected there after crashing into a plate glass window, 15 September, Mrs. Louise Button.

Water Pipit, a dusk flight passing southward in a narrow, steady stream, Currituck Sound, N.C., estimated total, 2,700 individuals, 25 August, Ronnie Underwood.

Blue-winged Warbler, 1 near Lake Benson, Raleigh, N.C., 21 August—early, R.J. Hader; 1, Bodie Island, N.C., 27 August, a first for the area, R.J. Hader and Paul Sykes Jr.

Tennessee Warbler, 1 captured in a mist net, Magnolia Gardens, S.C., 10 October, T.A. Beckett III.

Black-and-white Warbler, 1 female at Greenville, N.C., 9 May, Edmund Welch.

Kentucky Warbler, 1 at Hilton Head Island, S.C., 9 September, Mrs. Caroline Newhall.

Bobolink, huge flock in bean field, Hilton Head Island, S.C., 4 September, departed by 8 September, Mrs. Caroline Newhall.

Baltimore Oriole, 1 female, St. Andrews area, Charleston, S.C., 30 August, David Chamberlain; 1 male at Summerville, S.C., 28 September, Mrs. Louise Button.

Evening Grosbeak, 1 female, Windermere area, Charleston, S.C., 6 October, Mrs. Louise Barrington.

Purple Finch, female arrived 4 February, peak number, 10, last to leave, a female, 7 April, yard at Greenville, N.C., Edmund Welch.

Lark Sparrow, 6 on Wright Brothers monument grounds, Kitty Hawk, N.C., 15 August, Edmund LeGrand.

Swamp Sparrow, 1 wintered in yard at Greenville, N.C., last seen, 1 April, Edmund Welch.

NEWS AND COMMENTS

Nest Record Cards—Urgent Appeal

Dr. James F. Parnell, Department of Biology, Wilmington College, Wilmington, N.C., urges all members who have not returned their completed nest record cards to do so immediately. The success of the Cornell Laboratory of Ornithology nest record card program depends on the cooperation of the individual field observers. Even one card will be greatly appreciated: it may be the *only* one from your county!

Correction

The 1965 Spring Count summary paragraphs (*Chat,* 29:77) inadvertently listed the Lenior, N.C., area as "Lenoir County." Please correct your copy to read: "Lenoir, Caldwell Co., N.C. (all points within a 15-mile diameter circle centered" etc. Fortunately the location was named correctly elsewhere in the same report. The Editor apologizes to the Lenoir observers and to Rhett Chamberlain, who was in no way responsible for the error.

In Memoriam

Carolina Bird Club extends sympathy
to the families of members who have passed away
since 1 September 1965.

Miss Louisa Carlisle of Spartanburg, South Carolina
Council Claudius Dawson of Crammerton, North Carolina
C.T. Downer, O.D., Tryon, North Carolina

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I certify that the statements made by me above are correct and complete.

Harry Davis, managing editor

Carolina Bird Club
INC.

Founded 6 March 1937 **Incorporated 8 August 1949**

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. The several classes of membership are listed below. Checks should be made payable to Carolina Bird Club, Inc., and sent to the Treasurer.

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OFFICERS

President — Col. Norme D Frost, Box 271, Tryon, N.C.
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The Chat

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Vol. 30 March 1966 No. 1

The Chat

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Editor ---------------------------------- Eloise F. Potter, Box 487, Zebulon, N.C.
General Field Notes -------- B.R. Chamberlain, Rt. 1, Wadmalaw Island, S.C.
Backyard Birding ------------------ Annie Rivers Faver, Rt. 2, Eastover, S.C.
Conservation ------------ Gladys Buckner, 500 West Ave., North Augusta, S.C.
Editorial Board ------ Thomas L. Quay, B.R. Chamberlain, Charles H. Blake
Contributing Editors -------------------------- John K. Terres, Jack Dermid,
John Henry Dick, and Alexander Sprunt Jr.
Associate Editors -------- Thomas W. Simpson, Kay C. Sisson, James F. Parnell,
Doris C. Hauser, Ernest Cutts, and Adair M. Tedards

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OUR COVER—Fulvous Tree Duck photographed at Pullen Park, Raleigh, N. C., April 1965, by John E. Erickson.

PRESIDENT'S PAGE

January 1st has come and gone and the Carolina Bird Club finds itself the proud owner of an 83-acre Sanctuary which it voted to accept and perpetuate in the cause of Conservation. Several members have written suggestions for operating it; others have expressed willingness to teach Nature Classes; a few have applied to be the caretaker. I have received contributions toward the immediate support of the Sanctuary, and a number of others have pledged additional financial support. All of these communications constitute a clear indication that there does, in fact, exist sufficient enthusiasm and interest in our new adventure to insure its ultimate success. Until the appointed committees have had time to study ways and means for soliciting voluntary contributions, donations, bequests, etc., I feel the urgency for every member who wishes to help the club through its first year of "overhead" costs for the Sanctuary (maintenance, insurance, utilities, and care of grounds), to make a contribution now, however small, and send it to our new Treasurer, Wendell P. Smith, 911 E Street, North Wilkesboro, N. C., and earmarked for the Sanctuary Fund.

The CBC Headquarters has been established at the Sanctuary and it is planned that it contribute an appropriate amount to the Sanctuary Fund in lieu of rent for office and storage space, for which it would have to pay if located elsewhere. This will help defray the monthly overhead costs required. When sufficient funds are made available regularly on an annual basis, our first objective will have been accomplished. Over and above that, any improvement or development project will have to be financed first before it can be started. A "pay as we go" policy should be followed.

As I stated previously, ". . . an organization runs on motivation and its members have to care whether it does well or badly." We now find ourselves at a new milestone in our progress. The strength of our organization depends upon each member. Your CBC membership is of importance to the cause of conservation.

The normal cost of operation of our headquarters is derived from membership dues with a little surplus. These small surplusses have been the main source for the accumulation of our existing savings account. This account should be held in reserve for emergencies for the Headquarters. The operations of the Headquarters should be separate from the operations of the Sanctuary, as far as financing is concerned.

During the past two years your Executive Committee has accomplished the following major items of business: 1) Dividing the two-state area into three Field Trip Regions, for better management. 2) Adopting the policy for Vice-presidents and Members-at-large to be elected from these Regions to equalize representation throughout the Carolinas. 3) Establishment of a Records Committee for the authentication of bird reports for publication in the CBC official bird list. 4) Approval of the proposal to raise the Regular Class Membership dues from $1.00 to $2.00. 5) Approval to accept the 83-acre gift of property for a Sanctuary. 6) Approval to amend the Charter to bring it up to date. 7) Approval to establish CBC Headquarters at the Sanctuary. 8) Approval to appoint Special Committees to finance and operate the Sanctuary. 9) Approval to change printers for our bulletins. 10) Approval to amend the Bylaws to bring them up to date. Some of these items have already been voted upon, adopted, or otherwise are being prepared for action by the membership.

Committees Appointed

Under the recommendations of the Executive Committee, I have appointed the following Special Sanctuary Committees COMMITTEE FOR FINANCING: William McIntosh (Chairman), 1313 Broad, Charleston, S.C.; John Thompson, 419 East Duke Circle, Rocky Mount, N.C.; A.T. Allen, 143 West End, Chester, S.C.;

Dr. Archie Shaftesbury, 315 Tate Street, Greensboro, N.C.; Clyde Sisson, 1617 Tanglewood Road, Columbia, S.C. COMMITTEE FOR PLANS AND OPERATIONS: James Shuler (Chairman), 43 Kirkwood Lane, Greenville, S.C.; Gaston Gage, 305 Edgewood Ave., Clemson, S.C.; Mrs. Margaret Y. Wall, 5 Springdale Court, Greensboro, N.C.; Mrs. Carla Nesslinger, Tryon, N.C.; B. Rhett Chamberlain, Wadmalaw Island, S.C.; Edwin W. Winkler, 509 Gardner St., Raleigh, N.C.; Ed. Manchester, 106 Woodbine Place, Lenoir, N.C.; Dr. John Preston, Tryon, N.C.; Mrs. S.E. Hartin, 4520 Colonial Dr., Columbia, S.C. These committees are appointed for an indefinite period. Replacements or additions may be made as required.

I have also appointed the following members to the NOMINATING COMMITTEE: Fred May (Chairman), 211 Beale St., Lenoir, N.C.; Mrs. Edwin Winkler, 509 Gardner St., Raleigh, N.C.; Connor Tedards, 207 Brown Road, Anderson, S.C.; Pinkney King, 1719 Home Ave., Hartsville, S.C.; Mrs. Susie Rust, Rt. 2, Kinston, N.C.; Mrs. Annie Faver, Beaumont, Eastover, S.C.

The Executive Committee has requested that I continue the temporary responsibility as Editor of the Newsletter. All items intended for the NL should be sent directly to me. Deadline for the next issue is 10 March.

Sanctuary Donor Honorary CBC Member

The Executive Committee approved designating Mrs. Helen G. Shuford Brown as an Honorary Member of the Club, which carries all the privileges of membership. This action was taken as a token of the membership's gratitude and appreciation for this valuable gift to the Club in the cause of Conservation of our Natural Resources.

Charleston Meeting Well Attended

The Mid-Winter Field Trip Meeting held at Charleston, S.C., 14-16 January, was co-sponsored by the Charleston Museum and the Charleston Natural History Society. In spite of the most unfavorable weather, 106 members were registered, and 109 bird species were recorded. The evening meetings took place at the Museum where refreshments were graciously provided by Director Milby Burton. Field Trips on Saturday were led to Magnolia Gardens and to Humphreys' Place on lower John's Island. At each location a warm welcome and hot coffee were received with enthusiasm, and special praise went to Mr. and Mrs. Wm. Humphreys and Mr. and Mrs. Ted Beckett. At the invitation of Mr. John Henry Dick, most of those attending the meeting visited his Dixie Plantation on Sunday morning. He conducted them to his enclosures of exotic wildfowl, and into his studio where he showed his excellent work of line-drawings, paintings, and photography of wildlife and landscapes of the low-country. Our sincere appreciation is extended to all of those who gave their time and effort in welcoming us to Charleston.

Dues Reminder

You are reminded that the Club's annual dues begin with January 1st of each year and become delinquent after that date. Advanced notices are included in the September *Chat.* Separate notice for payment of dues to the membership at 5¢ each would cost the Club about $75 annually plus another such amount to send a membership card when dues are paid. Our present system is unsatisfactory. Errors are bound to creep in, but until the Club can afford to spend $150 annually for the "card" system, we will have to tolerate continuance of the present system. *The Chat* is "bulk-mailed" and cannot be forwarded if you change your address. Copies which cannot be delivered are returned to Headquarters. If you change your address, or your name, please notify CBC Headquarters. If you pay your dues and do not receive your bulletins, let your Headquarters know about that too, so the trouble can be traced. It is a difficult job to maintain an accurate mailing list. You can help yourself and your Headquarters by paying your dues promptly, and notifying it whenever you change your address or your name. Your attention is called to the **NEW ADDRESS of the CBC Headquarters: P. O. Box 1220, Tryon, N. C. 28782.**

Spring Meeting Scheduled

The Annual General Assembly and Spring Field Trip Meeting is scheduled to be held at Wrightsville Beach, N.C., 22-24 April. A new slate of officers will be elected as part of the business to be conducted. Vice-president "Sandy" Siler is the Region Field Trip Director and is in charge of making arrangements for the meeting. Since the meeting will be held during the coastal migration period, it should be a most interesting one. A Newsletter will be published giving additional information on accommodations as well as Club notices.

A Word of Appreciation

With this issue of *Chat,* it is my last opportunity to let the membership know of my appreciation to each member of the Executive Committee, and all Special Committees, who worked with me so cooperatively and effectively. My many thanks go to the various members of the Club who took the time and interest to write to me. Without all of this help and support, my job would have been much more difficult, if not completely ineffective. My efforts have always been directed towards the objectives which I believed our Club was dedicated to achieve. Our membership has chosen the course of progression, and the immediate future will test the real strength and effectiveness of the organization.

NORME D FROST

NEWS AND COMMENTS

North American Nest-record Card Program for 1966

The first year of the North American Nest-record Card Program went very well. The Laboratory of Ornithology mailed out over 45,000 cards to individuals and regional centers from Florida to Alaska. We were encouraged at the response; over 23,000 completed cards were received from 700 individuals. We have accumulated over 500 cards each for several species; among these are Eastern Phoebe, Tree Swallow, Barn Swallow, House Wren, Catbird, Eastern Bluebird, Red-winged Blackbird, and Common Grackle. The Red-winged Blackbird has been selected for a trial run on the computer, and the data from our 2,300 cards on that species are now being punched onto IBM cards.

The principal aim of the program is to accumulate a large amount of data on the breeding biology of birds of the entire North American continent. This data will be stored on IBM cards in a form ready for analysis. This data, once processed, will be available to researchers interested in many areas of avian biology, such as annual and geographical variations in breeding seasons, clutch size, fledging periods, and nesting success. We hope that the program will also play a key role in the study of man's modification of his environment through marsh drainage, urbanization, and the use of pesticides.

We need data from all parts of the country. Observations from city parks and backyards, of the commonest species, are as important as those from remote parts of the continent. We need the cooperation of all competent field observers; please get in touch with your regional center for the distribution of cards.

(Continued on Page 33)

The Fulvous Tree Duck in the East: Its Past and Present Status

H.L. Jones

The Fulvous Tree Duck (*Dendrocygna bicolor*) is a long-legged, goose-like duck that inhabits the marshes and rice fields of the southwestern United States and Mexico. It is an unusual bird in that it is neither a duck nor a goose in the true sense, but shows certain characteristics of both. Phylogenetically, it is placed between the geese and the ducks in the subfamily *Dendrocygninae*. Its name is misleading, since it is seldom found in trees and only rarely nests in them.

This tree duck is a striking example of a bird that has a discontinuous distribution. There are five distinctly separate populations of this bird in the tropical and sub-tropical regions of the world. The race found in the United States breeds primarily in Mexico, but is also found in southwestern Louisiana, coastal Texas, southern Arizona, and southern California. Other races are also found in northern South America from Columbia to the Guianas, southeastern South America from central Brazil to central Argentina, in eastern Africa and Madagascar, and in India and Ceylon. Since it is highly improbable that this species could have arisen from five different ancestors through the process of convergent evolution, there are two remaining explanations for the discontinuous range of the tree duck. Richard H. Pough *(Audubon Water Bird Guide,* 1951) states that this distribution "suggests either a decadent species of which only a few relics survive or an aggressive species which is spreading and colonizing new areas." When his book was published in 1951 it seemed probable that the former was the case, since it is unlikely that birds from a single, uninterrupted population could spread into four new and widely separated areas of similar size with no apparent links between populations; however, trends over the past decade shed some doubt on this hypothesis. Though Pough felt that the Fulvous Tree Duck was probably a decadent species, he states that "the bird seems to have found certain types of recently created man-made habitats so much to its liking that it has increased markedly in some of these localities." This statement, supported by the fact that the tree duck has spread rapidly into new localities far from its breeding grounds in recent years, lends support to the idea that it may be an aggressive species with an ability to adapt readily to new environments. This hypothesis is supported by James Baird in an interesting account on the Fulvous Tree Duck in the "Changing Seasons" section of *Audubon Field Notes* (17:6-8).

The possibility that the tree duck is a decadent species cannot be eliminated, however. Albert Hochbaum in *Travels and Traditions of Waterfowl* (1955) said that ducks do not seem to be bound by the apparent standards of direction presumed to be handed down by heredity in most birds. In relating this possibility to the Fulvous Tree Ducks, Newman and Andrle (*AFN*, 15:8) suggest that a species "can strike out to a radically new range without waiting for the evolution of a new standard direction and without interference from the old one." Another possible explanation for this dispersal, as mentioned by Baird, is that non-lethal doses of insecticides may be creating a stress condition in the nervous system of the affected birds. Though creation of such stress conditions usually results in a population decline, they may also cause the birds to wander in search of new territories. This possibility does not explain the fact that tree ducks are still practically non-existant in localities to the north of its breeding ranges such as Austin and Dallas, Texas, eastern Arizona, and New Mexico, yet are now commonplace in some areas along the Atlantic coast roughly a thousand miles east of its nearest breeding grounds.

Neither of the above explanations suggests that the bird is an aggressive species; however, it is evident that the bird readily adapts to new environments.

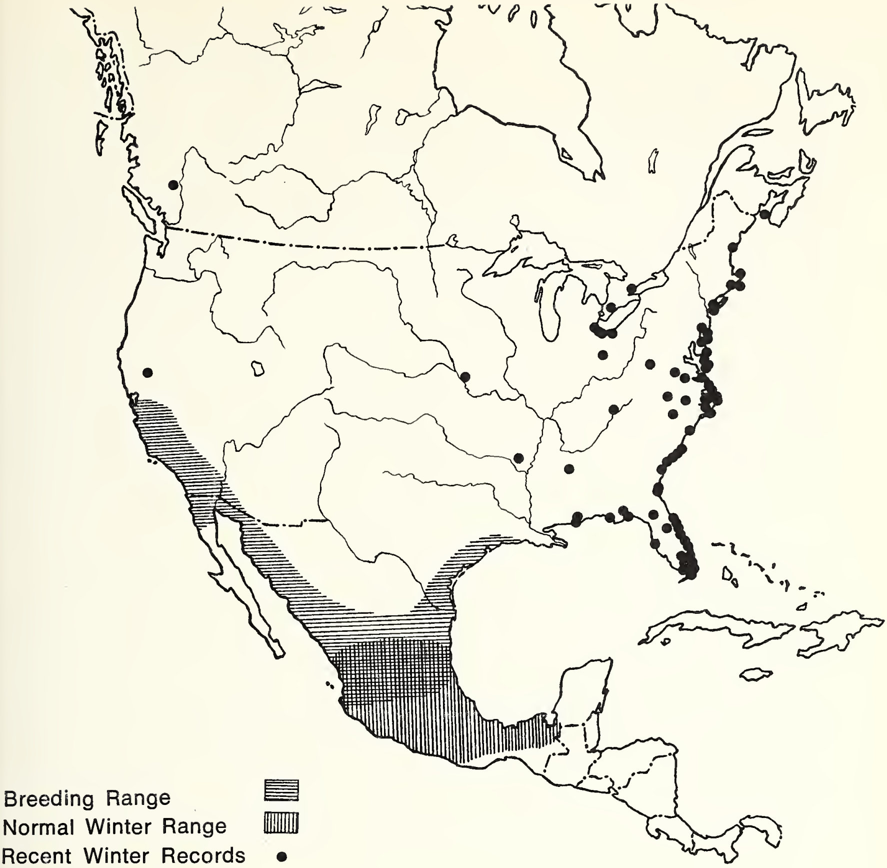

Figure 1. Fulvous Tree Duck range in North America showing winter records, 1949-1965

This ability to adapt to new conditions has enabled the tree duck to sustain itself on its recently acquired wintering grounds to the point that it is now considered an established winter resident in these regions. It will be interesting to see if the tree ducks begin to nest along the Atlantic coast in the future, if they remain winter residents only, or if these winter dispersals prove to be just a passing phenomenon.

Fulvous Tree Ducks in the East

Only ten years ago the Fulvous Tree Duck was considered to be an accidental stray anywhere in the United States outside of its breeding range. Today it is an established winter resident from Florida to Virginia and a regular visitor to the Northeast. It is beginning to spread inland in winter as far as Michigan, Ohio, and Tennessee. In some localities a few birds have occasionally remained through the summer, but there are no indications of breeding. Though the Fulvous Tree Duck has spread widely throughout much of the East, there are only a few isolated records of the species to the north and west of its range.

Perhaps the first indication of this unusual movement into the East came during the winter of 1948-1949 when two Fulvous Tree Ducks were found near Southern Pines, Moore County, North Carolina on 15 April 1949 by Charles

Broley. There had been a few other records of tree ducks in the East before, including one from Currituck Sound, North Carolina in 1886, so no one ever expected a mass invasion of tree ducks to follow. However, the following winter a Fulvous Tree Duck was seen in southern Florida, and in the fall of 1950 a flock of 51 tree ducks reached the rice fields near Lonoke, Arkansas. In the spring of 1953 one was found near Mound City, Missouri. Through these records indicated that the Fulvous Tree Duck was beginning to turn up more frequently to the east and northeast of its breeding range, there was still no indication of an invasion at that time. If a line were to be drawn, the winter of 1955-1956 would probably be considered as the beginning of the era in which the status of the Fulvous Tree Duck was to change from that of a rare straggler in the East to that of a well established winter resident in many localities. During this winter four tree ducks were found in Colleton County, South Carolina, and two were found on Lake Okeechobee, Florida. In the winter following this initial "invasion" they were seen again in South Carolina and Florida, as well as in Alabama. The same trend continued during the winters that followed with birds being seen as far north at Knott's Island, North Carolina in the fall of 1959 and Ocean City, Maryland during the *summer* of 1960. By the end of 1960 the Fulvous Tree Duck was nearing the status of an established winter resident in Florida and the Carolinas. Perhaps the most startling find of all came during the winter of 1961-1962 when Austin Squires found 21 on Grand Manan Island in the Bay of Fundy on 4 November 1961. During this same winter tree ducks were found for the first time in New Jersey, Connecticut, and Rhode Island.

As if the invasions of the Fulvous Tree Duck to the Atlantic coast were not surprising enough, in the fall of 1962 they were reported hundreds of miles from the coast in such places as Toronto, Ontario; Monroe County, Michigan; and three different localities in Ohio. By the end of 1964 they had been reported in every Atlantic and Gulf coast state except New Hampshire and many of the other states east of the Mississippi River. In 1965 few new localities were added to the list of places where Fulvous Tree Ducks had been seen, and the numbers of tree ducks reported from places where they were already established seemed to be leveling off.

Fulvous Tree Ducks in the Carolinas

Birds of North Carolina (1959) lists two records of the Fulvous Tree Duck in North Carolina. The first record was made in July 1886 when one was taken near Swan Island Club in Currituck Sound and sent to the National Museum in Washington, D.C. The next record, as mentioned earlier, was made in 1949 at Southern Pines. Though the first record is an isolated example of a rare straggler from Mexico, the second record is perhaps an indication of the invasion that was to follow.

South Carolina's first record was made on 16 December 1955 when a tree duck was collected from a flock of four on the Pon-Pon section of the Edisto River in Colleton County. Less than a year later a flock of 24 to 27 tree ducks was seen on the Savannah River Refuge in South Carolina. They were first spotted by Mr. Wineland of Louisiana on 26 November and they remained at least until 23 December. The presence of such a large number of birds, plus the fact that four had appeared the year before only 50 miles from there, cannot be explained away as coincidental. Their presence was supported by the fact that Fulvous Tree Ducks were also showing up elsewhere along the eastern seaboard.

These birds continued to show up in the Carolinas with increasing regularity. A flock of 30 was observed on the Savannah River Refuge again from 15 December 1959 until 13 January 1960. That same winter three appeared on the Orton Wildlife Refuge near Wilmington and another one was shot on Knott's Island, North Carolina near the Virginia line. During the winter of 1960-1961 they were found virtually everywhere along the coast of the two Carolinas. There were so many records from widely scattered localities that Chamberlain (*AFN*, **15**:319) was prompted to say that the Fulvous Tree Duck was "nearing the status of an established winter resident on the Carolina coast." A rare straggler anywhere east of Louisiana only five years before, the Fulvous Tree Duck was rapidly becoming a regular winter visitor, not only in the Carolinas, but elsewhere in the South as well.

By 1962 tree ducks were expected sights in many areas along the coast such as Cape Hatteras, Orton Plantation, and the Savannah River Refuge. There was apparently a slim return though during the winter of 1963-1964 according to Chamberlain; however, last year the population seemed to be back up again. Until last winter all of the records in recent years had been from the coast, but last spring three birds turned up in the Piedmont, one in Raleigh and two in Greensboro. The Raleigh bird was found by Phil Warren on 30 March and remained long enough to be seen and photographed by many observers. It was last seen on 18 June by R. J. Hader. The two birds in Greensboro were found by Brad Hawkins on 24 April and remained in the area for at least two weeks. These two inland records are not too surprising when one realizes that for the previous two winters tree ducks had been turning up in the Great Lakes region as well as Tennessee, Indiana, and even the mountains of Virginia.

SUMMARY

Where the tree ducks have been found has been relatively easy to relate; but how they reached the East and why they came are not fully understood, and the answers to these questions can only be theorized. The big question now is "What next?" Will these birds continue to winter here in the East, thus establishing a stable winter population completely separate from its other wintering grounds in Mexico? Will they begin to breed in the East, thereby expanding their breeding range to more than twice its original size? Will this phenomenal range expansion also take place in the other widely separated areas of the world where the Fulvous Tree Duck is also found? The number of questions that can be asked is almost endless and can only be answered as more and more observations are made in the future. It should be very interesting to follow the trends of the Fulvous Tree Duck populations in the future and watch the answers to these questions unfold.

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Department of Zoology, North Carolina State University
Raleigh, North Carolina
15 January 1966

CONSERVATION

OUR DIMINISHING WETLANDS

Gladys Buckner

What about Bald Head?

According to an article by Adrian King in the Raleigh, N.C., *News and Observer* dated 20 February 1966, the State Board of Conservation and Development will investigate the problems related to the possible development of Bald Head Island during a two-day fact-finding mission in April. The tropical-looking island, also known as Smith Island, is located in the mouth of the Cape Fear River. Owner Frank O. Sherrill wants to develop the property into a residential-resort area similar to South Carolina's Hilton Head Island. Others want to see the island preserved in its natural state.

James W. (Willie) York of Raleigh, chairman of the C&D board, raised the possibility of some sort of compromise at the recent board meeting in Salisbury. He speculated that it might be possible for part of the island to be preserved as a natural wonderland and for part of it to be developed as a resort paradise. At York's suggestion, the C&D board decided to meet as a committee of the whole at Wrightsville Beach for a first hand view of the Smith Island complex.

On 1 April the board members will make a land and air tour of the area. On 2 April the board will hold an all-day public hearing so that anyone with ideas about the development or non-development of Smith Island can get them aired. Mr. Sherrill will be present for the meeting, which will have headquarters at the Blockade Runner Motel at Wrightsville Beach.

Commercial and Sports Fisheries Commissioner David A. Adams has indicated he would vigorously oppose any plan which would greatly disturb the marshlands surrounding the island. "Tidal marshlands such as those around Smith Island form an important part of our coastal fisheries resource as nursery grounds," Adams said. He called marshes "essential to the sustained production of oysters, shrimp, crabs and fish."

Dan E. Stewart, who has been C&D director for about seven months, admitted he is still getting acquainted with all the angles of the debate, "but I'm getting the feeling we should not dispose of State property that's good fish breeding grounds." He noted that many other states are having to re-purchase land to provide nursery areas to sustain a wholesome fishing industry.

Dr. Arthur W. Cooper, botany professor at North Carolina State University at Raleigh, is a spokesman for an informal group of naturalists who fear the consequences of total commercial development of the Smith Island complex. He has suggested that the island be turned into a public recreation area. Development of the island as a park would preserve the natural features of the complex and still provide the means by which Brunswick County could realize some financial gain through money spent by tourists.

It is expected that all sides of the debate will be explored at the C&D board meeting on 2 April; however, York said the committee will take no action at the time. Recommendations regarding the development of Smith Island will probably be made at the board's spring meeting in High Point 15-17 May. Nearly a year ago Carolina Bird Club passed a resolution favoring the preservation of the Smith Island complex in its natural state, but it would still be appropriate for individual members to make their views known.

The New Conservation

"The New Conservation" was the program theme of the National Audubon Convention held in Boston, October 1965. New Conservation requires professional planning for the needs of the future as related to air, water, and land. It involves air and water pollution control and the wise protection and development of our lands, both wet and dry. The need to save our salt marshes and estuaries was declared to have reached a state of crisis.

Alexander Sprunt IV, Audubon Research Director, in his report on the 1965 Wading Bird Survey discussed the importance of the Texas and Louisiana marshlands to the bird life of America. Thus far these lands have been preserved because of their economic value in the cultivation of rice. They are now endangered by the development of the oil industry. In the course of his report he told of the absolute disappearance of the brown pelican as a breeding bird on the Louisiana coast and a reduction to only 28 known pairs on the Texas coast as well as a reduction of wading birds on the Mississippi marshlands and at the mouth of the Colorado. The cause of this decrease is not yet definitely known.

Dr. Gottschalk, Director, U. S. Bureau of Sport Fisheries and Wildlife, stated that statistics show that salt water fishing is the most widespread recreation of the United States. Without a national policy for the protection of our marshlands they will shortly disappear as a result of their development for economic purposes — viz., draining for housing and industry, depositories for wastes, etc.

Dr. Ian McHarg, Department of Landscape Architecture, University of Pennsylvania, stated that since marshlands are necessary it should be legally established that they are not to be built upon.

Mrs. Donald H. McLaughlin, Secretary, Save San Francisco Bay Association, spoke of the irrevocable loss of much of the San Francisco bay area and that, granted the remaining portion can be saved from speculative investment, there is still the threat of ruin by pollution.

Consensus of opinion seemed to conclude that with the help of private and public specialists the facts concerning the need for protection of our wetlands can be effectively presented to the public with the consequent enactment of laws for the wise development of such lands. Massachusetts is considering legislative approval to save her marshlands and Rhode Island has already passed statutes for the protection of her coastal wetlands.

Dr. John P. Saylor, Congressman from Pennsylvania and keynote speaker at the Convention, warned that conservation problems are acute; that the effectiveness of a conservation bill is often weakened by the addition of exceptions initiated by opposing groups. He reminded constituents that letters from individuals are welcomed and helpful.

A recent Fish and Wildlife bulletin states that already a major part of America's wetlands has been lost. In view of the situation the Bureau of Sport Fisheries and Wildlife plans to preserve approximately 1,750,000 acres of waterfowl breeding habitat, mostly in Minnesota, North Dakota, and South Dakota, by outright purchase and by easements which provide for payments to landowners in return for an agreement not to drain or otherwise alter specific water areas. The financing of the work of preserving wetlands has been through the sale of Migratory Bird Hunting Stamps.

In Saskatchewan, Canada, South Carolina is helping to rehabilitate a wild duck breeding area consisting of approximately 52,000 acres of waterfowl nest-

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Backyard Birding

Annie Rivers Faver
Department Editor

Falcon Safety Patrol

In the magazine *National Wildlife*, the October-November 1965 issue, there is an article by Ron Baird that offers one solution of our recently discussed problem of Airplanes vs. Birds. I quote as follows:

"An ancient sport has come to the aid of modern transportation at International Airport at Victoria, British Columbia. Falconer Frank Beebe and his assistant, Brian Davies, are using specially trained peregrines and gyrfalcons to keep the runways clear of flocks of sea gulls. Canadian Aircraft suffered 400 collisions with birds, mostly sea gulls, from 1961 to 1964, and they resulted in over two million dollars in damage.

"At Victoria, high winter tides forced the gulls from their beach feeding grounds, and they settled on the airport turf in search of earthworms. The National Research Council of Canada asked Beebe, a wildlife illustrator with the Provincial Museum, to experiment with falcons as a deterrent to their visits.

"Starting with peregrine nestlings captured in the Queen Charlotte Islands, Beebe trained the raptors with seagull-shaped lures, then moved to the airfield with observers from the Research Council, the Royal Canadian Airforce, officials from the Department of Transport and several commercial airlines. The swift little falcons plunged into wheeling flocks of gulls, routing them instantly.

"Since then, Beebe or his assistant take the hawks to the airport daily during the danger period, from October through March. They added four Arctic gyrfalcons to their squadron, and found that the bigger, higher-flying birds were even better than peregrines at routing the gulls. The falcons, trained to harass seagulls, pay no attention to other birds. The seagulls, thoroughly frightened by the falcons, stay clear of the airport. Until wildlife control experts come up with some better way to keep the gulls away, the medieval sport of falconery will probably continue to protect the modern business of flying."

Backyard Notes from Etta Schiffman

August 9, 1965 – This morning I saw something so cute and intriguing that I must write it down before I forget a single detail of it. The trumpet vine on the carport is in full bloom. I am accustomed to seeing hummingbirds hovering around the bright orange blossoms, but this time I saw something quite different.

When I came into the kitchen at about 7:30, I stood at the window a moment to enjoy the picture made by the vine-draped carport a few feet from the window. I was surprised to see a pair of chickadees fly to the vine and perch on one of the long, drooping stems at the end of which was a cluster of blooms. One chickadee remained perched, but the other flew down to the cluster of blossoms, plucked one of the trumpet shaped flowers, and holding it in his beak by the "mouthpiece," flew to the top of a picket of the adjoining fence. There he sat, for what must have been half a minute, with his "trumpet," which was every bit as large as the bird, extending straight out in front of him. The effect was exactly as if the chickadee were blowing a trumpet.

Now, I have seen chickadees raid the sugar water in my hummingbird feeders, so I concluded that he might be sucking the nectar from the flower; but just as I came to that conclusion, he dropped the flower, flew back to the cluster, perched on the stem, and proceeded to rip open a tight bud. He probed into the bud a second or two, then both chickadees flew away.

I wonder what the little fellow really was doing. Was he enjoying his breakfast "juice"? Was he showing off for the benefit of the other chickadee? Of one thing I am sure — he was not really blowing his horn, but he certainly looked as if he were doing just that.

October 6, 1965 — Today must have been the peak of the fall migration. At least it was the peak as far as my yard is concerned. I was away all morning, so there is no way of my knowing what came to my yard then, but within the space of two hours in the afternoon my bird bath was swarming with migrants. The fact that we were in the midst of a rather long dry spell may account for so many birds finding the upper basin, with water dripping into it from the tall pipe in its center, so inviting.

The first one I noticed was a Ruby-crowned Kinglet, probably one of my winter regulars, just returned to spend the winter with me. Then I became quite frustrated when four or five warblers, so non-descript that I could identify them only as "confusing fall warblers," appeared. They returned several times while I was watching during those two hours, and I got a good look at all of them, but I never did figure out what they were. However, I did identify a number of other birds that came repeatedly to the bath during the afternoon. Of course many of my regular guests came, but I shall list here only those that were evidently pausing for a bath and a drink during migration. Here is that list: At least two Blackpoll Warblers, several Orange-crowned Warblers, one Blackburnian Warbler, one immature Cape May Warbler, at least two, and maybe more but I saw only two at a time, Gray-cheeked Thrushes, at least three Swainson's Thrushes, and several Red-breasted Nuthatches.* A male Scarlet Tanager* in winter plumage appeared briefly in the mimosa tree just outside the back door, but did not go to the bird bath as far as I know.

I have come to the conclusion that a good bird bath really pays.

*Later notes — The Red-breasted Nuthatches have remained and are regular visitors. On our regular field trip (Piedmont Bird Club) on November 7, we were amazed to find a pair of Scarlet Tanagers in winter plumage.

November 12, 1965 — Surprises never cease. This morning I noted that there was not a bird in the yard for quite a long time, probably more than half an hour, not even any movement high up in the trees. This is most unusual, but I did not think about it too much until the silence was broken by the screaming of a number of jays in the pines of the adjoining yard. My first thought was that somebody's cat was coming into the yard, so I went out quietly, picked up a handful of pebbles from the pile in the carport, and waited, hidden pretty well by the shrubbery at the corner of the carport. My plan, as usual, was to sting the critter a little with a pebble or two on the nose, if my aim turned out to be any good. At least I would drive the cat out of the yard. But no cat showed up,

(Continued on Page 37)

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Common Loon	64	1	3	30	11	14	1	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----
Red-throated Loon	61	7	9	9	26	9	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Horned Grebe	284	*	6	10	198	36	----	----	----	19	----	----	----	----	----	----	12	----	2	----	----	----	----	1	----	----	----	----
Pied-billed Grebe	283	30	27	27	47	10	7	13	16	12	3	16	5	3	6	----	32	3	15	1	3	4	----	----	2	1	----	----
Shearwater (sp. ?)	1	----	----	----	**1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Brown Pelican	55	8	4	13	21	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gannet	465	316	73	2	25	49	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Double-cr. Cormorant	118	----	42	28	47	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Anhinga	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Great Blue Heron	203	3	42	31	28	24	9	1	----	12	----	3	1	----	1	1	3	8	9	1	22	----	----	4	----	----	----	----
Green Heron	4	----	----	----	1	----	----	----	----	1	----	----	----	----	----	----	----	1	----	----	1	----	----	----	----	----	----	----
Little Blue Heron	32	----	2	5	15	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	3	----	----	----	----	----	----	----
Cattle Egret	1	----	*	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Egret	127	5	7	57	14	35	7	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Snowy Egret	67	3	3	2	32	27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Louisiana Heron	61	1	22	9	16	13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bl.-cr. Night Heron	111	21	67	6	16	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Yel.-cr. Night Heron	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----
Least Bittern	1	----	----	----	*	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
American Bittern	8	6	*	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
White Ibis	32	----	----	----	6	26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Whistling Swan	1572	52	----	----	----	----	1500	20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Canada Goose	42144	1475	----	15	----	----	40000	80	----	----	2	13	1	6	4	----	40	----	1	175	13	----	----	----	319	----	----	----
Snow Goose	1596	1396	----	----	----	----	200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blue Goose	2006	6	----	----	----	----	2000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mallard	3420	125	----	260	118	16	2500	----	40	----	5	150	----	----	----	----	13	----	29	86	20	4	----	2	43	9	----	----
Black Duck	4786	222	136	21	204	11	4000	----	----	----	5	5	----	----	----	----	14	15	29	8	113	----	----	----	2	----	----	1
Gadwall	423	192	7	10	205	3	----	----	----	1	----	3	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Pintail	31537	961	----	62	506	7	30000	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3000	----	----	----	----	12	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
Bl.-winged Teal	476	----	----	11	363	[illegible]	300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Wood Duck	141	----	*	4	79	3	25	----	----	----	2	6	----	----	----	----	13	----	4	----	5	----	----	----	----	----	----	----
Redhead	67	----	17	----	*	----	50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ring-necked Duck	1648	44	----	27	140	----	1000	8	----	11	6	175	----	7	5	----	159	----	62	----	1	1	----	----	----	----	----	2
Canvasback	1354	3	11	25	706	----	500	22	77	4	----	----	----	----	----	----	6	----	----	----	----	----	----	----	----	----	----	----
Scaup (sp. ?)	13573	----	21	7	5000	8540	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----
Greater Scaup	20	----	----	----	----	----	20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lesser Scaup	1022	----	----	----	----	----	1000	----	----	----	3	----	----	----	----	----	10	6	1	----	----	----	----	----	1	----	----	1
Common Goldeneye	19	*	1	----	6	----	12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bufflehead	2576	71	24	69	215	125	2000	----	----	----	----	----	----	----	----	----	15	----	56	----	1	----	----	----	----	----	----	----
Oldsquaw	204	*	----	3	----	1	200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Scoter (sp. ?)	37	7	----	30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
White-wg. Scoter	2	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Surf Scoter	533	*	----	----	24	----	500	7	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Scoter	2512	----	*	----	2000	12	500	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ruddy Duck	1693	----	32	----	504	9	300	25	253	520	----	----	----	----	----	----	49	----	----	----	----	----	----	----	1	----	----	----
Hooded Merganser	133	54	2	----	5	28	----	----	----	8	----	----	----	----	3	----	29	----	----	----	----	----	----	4	----	----	----	----
Common Merganser	8	----	----	----	----	4	2	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Red-br. Merganser	2034	337	137	35	59	44	----	250	75	1090	----	----	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Turkey Vulture	282	----	----	9	37	60	9	----	12	2	6	9	*	4	----	6	3	16	49	8	28	1	1	1	10	2	----	9
Black Vulture	385	----	1	----	87	222	10	----	16	----	7	5	*	2	8	6	----	8	----	----	10	----	----	3	----	----	----	----
Sharp-sh. Hawk	19	1	----	----	3	2	----	----	----	----	----	----	----	----	----	----	1	3	3	5	----	----	----	----	----	----	----	1
Cooper's Hawk	15	----	----	----	5	----	----	----	1	----	1	----	1	----	----	----	1	1	----	----	2	----	----	----	1	1	1	----
Red-tailed Hawk	133	----	----	1	22	15	1	----	2	2	4	4	1	2	12	1	12	5	14	4	4	7	----	14	1	1	----	4
Red-shouldered Hawk	58	1	1	3	12	3	4	----	2	3	1	----	----	2	11	----	1	1	6	2	1	1	----	3	----	----	----	----
Bald Eagle	6	----	----	1	1	----	2	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Marsh Hawk	102	9	3	7	33	20	5	----	----	1	----	3	1	----	6	1	2	----	2	1	1	----	1	6	----	----	----	----
Osprey	2	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----
Peregrine Falcon	5	1	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Pigeon Hawk	6	3	----	----	2	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----
Sparrow Hawk	511	6	183	5	24	70	69	18	19	4	14	18	8	5	14	2	12	3	8	2	5	1	----	14	----	----	1	6
Ruffed Grouse	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	6
Bobwhite	938	----	18	84	2	87	9	33	30	47	17	27	20	----	3	1	42	107	100	88	32	79	12	31	10	5	26	28
Ring-necked Pheasant	2	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Turkey	12	----	----	----	2	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
King Rail	6	1	----	2	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Clapper Rail	244	1	7	20	146	68	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Virginia Rail	2	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sora	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Gallinule	7	----	----	2	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Coot	7312	75	----	40	1058	12	5000	291	----	430	----	----	----	----	19	----	159	----	224	4	----	----	----	----	----	----	----	----
Am. Oystercatcher	1044	----	----	71	950	23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Semipalmated Plover	944	8	----	380	328	228	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Common Loon	64	1	3	30	11	14	1	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----
Red-throated Loon	61	7	9	9	26	9	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Horned Grebe	284	*	6	10	198	36	----	----	----	19	----	----	----	----	----	----	12	----	2	----	----	----	----	1	----	----	----	----
Pied-billed Grebe	283	30	27	27	47	10	7	13	16	12	3	16	5	3	6	----	32	3	15	1	3	4	----	----	2	1	----	----
Shearwater (sp. ?)	1	----	----	----	**1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Brown Pelican	55	8	4	13	21	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gannet	465	316	73	2	25	49	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Double-cr. Cormorant	118	----	42	28	47	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Anhinga	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Great Blue Heron	203	3	42	31	28	24	9	1	----	12	----	3	1	----	1	1	3	8	9	1	22	----	----	4	----	----	----	----
Green Heron	4	----	----	----	1	----	----	----	----	1	----	----	----	----	----	----	----	1	----	----	1	----	----	----	----	----	----	----
Little Blue Heron	32	----	2	5	15	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	3	----	----	----	----	----	----	----
Cattle Egret	1	----	*	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Egret	127	5	7	57	14	35	7	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Snowy Egret	67	3	3	2	32	27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Louisiana Heron	61	1	22	9	16	13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bl.-cr. Night Heron	111	21	67	6	16	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Yel.-cr. Night Heron	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----
Least Bittern	1	----	----	----	*	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
American Bittern	8	6	*	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
White Ibis	32	----	----	----	6	26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Whistling Swan	1572	52	----	----	----	----	1500	20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Canada Goose	42144	1475	----	15	----	----	40000	80	----	----	2	13	1	6	4	----	40	----	1	175	13	----	----	----	319	----	----	----
Snow Goose	1596	1396	----	----	----	----	200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blue Goose	2006	6	----	----	----	----	2000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mallard	3420	125	----	260	118	16	2500	----	40	----	5	150	----	----	----	----	13	----	29	86	20	4	----	2	43	9	----	----
Black Duck	4786	222	136	21	204	11	4000	----	----	----	5	5	----	----	----	----	14	15	29	8	113	----	----	----	2	----	----	1
Gadwall	423	192	7	10	205	3	----	----	----	1	----	3	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Pintail	31537	961	----	62	506	7	30000	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
Gr.-winged Teal	4841	1054	15	53	703	3	3000	----	----	----	----	12	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----
Bl.-winged Teal	476	----	----	11	263	----	200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	----	2	----	[illegible]	----	----	----	----	----	----	----	----	----
Shoveler	[illegible]	327	----	[illegible]	700	1	1000	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Wood Duck	141	----	*	4	79	3	25	----	----	----	2	6	----	----	----	----	13	----	4	----	5	----	----	----	----	----	----	----
Redhead	67	----	17	----	*	----	50	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ring-necked Duck	1648	44	----	27	140	----	1000	8	----	11	6	175	----	7	5	----	159	----	62	----	1	1	----	----	----	----	----	2
Canvasback	1354	3	11	25	706	----	500	22	77	4	----	----	----	----	----	----	6	----	----	----	----	----	----	----	----	----	----	----
Scaup (sp. ?)	13573	----	21	7	5000	8540	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----
Greater Scaup	20	----	----	----	----	----	20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lesser Scaup	1022	----	----	----	----	----	1000	----	----	----	3	----	----	----	----	----	10	6	1	----	----	----	----	----	1	----	----	1
Common Goldeneye	19	*	1	----	6	----	12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bufflehead	2576	71	24	69	215	125	2000	----	----	----	----	----	----	----	----	----	15	----	56	----	1	----	----	----	----	----	----	----
Oldsquaw	204	*	----	3	----	1	200	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Scoter (sp. ?)	37	7	----	30	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
White-wg. Scoter	2	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Surf Scoter	533	*	----	----	24	----	500	7	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Scoter	2512	----	*	----	2000	12	500	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ruddy Duck	1693	----	32	----	504	9	300	25	253	520	----	----	----	----	----	----	49	----	----	----	----	----	----	----	1	----	----	----
Hooded Merganser	133	54	2	----	5	28	----	----	----	8	----	----	----	----	3	----	29	----	----	----	----	----	----	4	----	----	----	----
Common Merganser	8	----	----	----	----	4	2	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Red-br. Merganser	2034	337	137	35	59	44	----	250	75	1090	----	----	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Turkey Vulture	282	----	----	9	37	60	9	----	12	2	6	9	*	4	----	6	3	16	49	8	28	1	1	1	10	2	----	9
Black Vulture	385	----	1	----	87	222	10	----	16	----	7	5	*	2	8	6	----	8	----	----	10	----	----	3	----	----	----	----
Sharp-sh. Hawk	19	1	----	----	3	2	----	----	----	----	----	----	----	----	----	----	1	3	3	5	----	----	----	----	----	----	----	1
Cooper's Hawk	15	----	----	----	5	----	----	----	1	----	1	----	1	----	----	----	1	1	----	----	2	----	----	----	1	1	1	----
Red-tailed Hawk	133	----	----	1	22	15	1	----	2	2	4	4	1	2	12	1	12	5	14	4	4	7	----	14	1	1	----	4
Red-shouldered Hawk	58	1	1	3	12	3	4	----	2	3	1	----	----	2	11	----	1	1	6	2	1	1	----	3	----	----	----	----
Bald Eagle	6	----	----	1	1	----	2	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Marsh Hawk	102	9	3	7	33	20	5	----	----	1	----	3	1	----	6	1	2	----	2	1	1	----	1	6	----	----	----	----
Osprey	2	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----
Peregrine Falcon	5	1	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Pigeon Hawk	6	3	----	----	2	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----
Sparrow Hawk	511	6	183	5	24	70	69	18	19	4	14	18	8	5	14	2	12	3	8	2	5	1	----	14	----	----	1	6
Ruffed Grouse	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	6
Bobwhite	938	----	18	84	2	87	9	33	30	47	17	27	20	----	3	1	42	107	100	88	32	79	12	31	10	5	26	28
Ring-necked Pheasant	2	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Turkey	12	----	----	----	2	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
King Rail	6	1	----	2	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Clapper Rail	244	1	7	20	146	68	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Virginia Rail	2	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sora	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Gallinule	7	----	----	2	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Coot	7312	75	----	40	1058	12	5000	291	----	430	----	----	----	----	19	----	159	----	224	4	----	----	----	----	----	----	----	----
Am. Oystercatcher	1044	----	----	71	950	23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Semipalmated Plover	944	8	----	380	328	228	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Piping Plover	38	28	----	4	----	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Wilson's Plover	4	----	----	----	*	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Killdeer	737	23	34	30	31	44	31	6	82	33	19	29	5	3	19	1	25	18	46	7	41	20	1	41	1	4	1	142
Bl.-bellied Plover	1134	73	6	62	821	172	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ruddy Turnstone	180	----	3	4	112	61	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Woodcock	25	----	4	3	1	1	2	----	----	1	----	----	----	----	----	----	1	----	3	----	7	1	----	1	----	----	----	*
Com. Snipe	220	3	1	10	26	2	104	----	1	1	1	3	----	5	4	----	10	5	16	9	15	2	----	2	----	----	----	----
Whimbrel	17	----	----	----	17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Spotted Sandpiper	4	----	----	----	*	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	1	----	----	1	----	----	----	----
Willet	167	----	1	37	93	36	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Greater Yellowlegs	59	8	2	15	27	1	4	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Lesser Yellowlegs	66	2	17	31	15	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Knot	207	----	----	----	----	207	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Purple Sandpiper	3	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pectoral Sandpiper	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Least Sandpiper	38	*	----	8	5	25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dunlin	5862	611	83	269	4062	836	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----
Dowitcher (sp. ?)	2608	**8	41	56	2500	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Stilt Sandpiper	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Semipalmated Sandpiper	898	5	6	587	----	300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Western Sandpiper	497	121	34	17	3	322	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Marbled Godwit	10	----	----	----	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sanderling	608	309	69	47	8	175	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Avocet	34	34	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Jaeger (sp. ?)	1	----	----	----	**1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gr. Bl.-backed Gull	270	233	12	4	1	----	----	9	3	8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Herring Gull	5355	3294	722	543	408	144	27	6	10	195	----	----	----	----	----	----	----	----	----	----	5	----	----	1	----	----	----	----
Ring-billed Gull	6721	2050	1400	668	456	134	133	288	351	612	----	----	----	----	203	36	----	*	----	----	378	*	----	12	----	----	----	----
Laughing Gull	125	----	72	----	1	21	----	----	30	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bonaparte's Gull	28	5	*	1	----	17	2	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gull-billed Tern	3	----	----	3	----	----	----	----	----	----	----	----	----	----	----													

Least Tern	1	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Royal Tern	17	6	1	4	1	3	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Caspian Tern	8	----	----	1	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Black Skimmer	163	2	*	2	150	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Razorbill	12	----	----	12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mourning Dove	4024	2	65	34	7	496	113	70	71	80	63	93	70	350	65	15	195	302	484	246	225	440	35	173	71	57	40	162
Ground Dove	6	----	----	----	----	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Barn Owl	4	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----
Screech Owl	14	----	----	1	3	1	1	----	----	----	----	----	----	----	----	----	----	----	7	----	1	----	----	----	----	----	----	----
Gr. Horned Owl	17	----	----	7	2	----	----	----	----	----	----	2	----	----	----	----	1	*	2	1	----	----	----	----	----	----	----	2
Barred Owl	20	----	1	2	3	2	----	----	----	----	----	----	----	1	----	----	1	4	4	----	1	1	----	----	----	*	----	----
Belted Kingfisher	360	2	82	20	104	37	18	4	8	15	1	5	----	2	2	----	6	11	9	4	5	2	----	6	2	1	1	13
Yel.-sh. Flicker	1400	40	17	70	143	306	42	45	30	109	32	17	11	5	30	24	120	100	110	44	41	27	1	11	4	1	4	16
Pileated Woodpecker	142	----	1	1	45	19	4	4	5	14	----	5	2	2	2	----	----	4	4	3	----	----	1	----	5	----	1	20
Red-bellied Woodpecker	570	5	3	9	59	35	5	11	3	16	6	18	6	3	4	10	60	95	104	40	23	35	3	9	3	1	----	4
Red-headed Woodpecker	86	----	1	5	----	3	----	4	----	----	1	2	----	----	2	3	14	14	4	4	24	5	----	----	----	----	----	----
Yel.-bel. Sapsucker	314	2	*	13	37	27	1	4	2	6	2	13	11	8	6	6	28	34	38	23	11	5	2	7	4	----	3	23
Hairy Woodpecker	133	1	1	1	5	9	3	2	1	3	1	1	3	----	3	1	12	19	17	8	12	8	1	1	3	*	----	17
Downy Woodpecker	462	4	----	2	33	16	8	16	1	18	7	9	5	4	16	6	40	59	75	42	17	34	3	9	9	1	2	26
Red-cock. Woodpecker	20	----	----	4	7	----	----	6	----	----	----	2	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eastern Kingbird	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Western Kingbird	----	----	**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eastern Phoebe	116	----	4	8	13	12	2	5	2	10	2	5	3	1	5	----	3	9	5	----	6	3	----	1	2	1	3	11
Wood Pewee	4	----	----	----	----	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Horned Lark	247	----	----	----	----	----	----	----	----	----	63	----	----	----	----	----	----	----	65	10	40	21	11	23	12	----	1	1
Tree Swallow	310	----	----	2	----	----	289	----	19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Barn Swallow	1	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blue Jay	2081	----	16	94	268	80	----	108	22	72	42	17	8	17	92	35	260	108	293	112	106	161	9	25	13	18	40	65
Common Raven	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	9
Common Crow	2577	5	6	33	246	349	300	9	26	76	6	13	*	4	32	8	102	120	298	77	185	67	16	43	19	91	25	421
Fish Crow	1004	----	23	65	78	729	100	5	2	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Car. Chickadee	1803	12	13	34	74	87	29	44	9	38	21	13	10	7	34	22	284	158	239	165	106	114	10	43	25	8	24	++180
Tufted Titmouse	911	1	*	21	22	14	4	21	----	46	18	25	4	6	18	10	137	105	137	81	33	79	10	13	8	5	20	73
White-br. Nuthatch	223	1	----	----	16	----	----	3	----	6	----	3	3	----	----	6	20	42	30	48	8	7	1	2	9	1	1	16
Red-br. Nuthatch	181	----	----	2	----	4	----	2	----	----	----	----	----	----	----	7	12	8	22	50	----	4	1	----	4	----	----	65
Brown-hd. Nuthatch	336	4	7	44	18	2	----	8	10	11	3	6	9	----	8	12	22	31	78	21	8	13	10	10	1	----	----	----
Brown Creeper	120	2	3	5	3	2	----	1	----	3	2	*	----	----	3	6	15	16	11	9	4	4	2	4	1	1	1	22
House Wren	23	1	----	5	6	2	----	1	2	1	----	1	----	----	----	----	3	----	----	----	----	----	----	----	----	----	----	1
Winter Wren	33	1	----	3	2	3	----	----	----	1	1	*	----	1	1	----	2	1	6	1	1	----	----	2	----	1	1	5
Bewick's Wren	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Carolina Wren	915	14	----	33	135	55	5	27	8	29	26	11	7	4	32	19	73	108	96	43	41	48	8	8	7	8	15	55
Long-bil. M. Wren	40	4	19	6	3	3	----	----	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Piping Plover	38	28	----	4	----	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Wilson's Plover	4	----	----	----	*	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Killdeer	737	23	34	30	31	44	31	6	82	33	19	29	5	3	19	1	25	18	46	7	41	20	1	41	1	4	1	142
Bl.-bellied Plover	1134	73	6	62	821	172	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ruddy Turnstone	180	----	3	4	112	61	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Woodcock	25	----	4	3	1	1	2	----	----	1	----	----	----	----	----	----	1	----	3	----	7	1	----	1	----	----	----	*
Com. Snipe	220	3	1	10	26	2	104	----	1	1	1	3	----	5	4	----	10	5	16	9	15	2	----	2	----	----	----	----
Whimbrel	17	----	----	----	17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Spotted Sandpiper	4	----	----	----	*	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	1	----	----	1	----	----	----	----
Willet	167	----	1	37	93	36	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Greater Yellowlegs	59	8	2	15	27	1	4	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----
Lesser Yellowlegs	66	2	17	31	15	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Knot	207	----	----	----	----	207	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Purple Sandpiper	3	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pectoral Sandpiper	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Least Sandpiper	38	*	----	8	5	25	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dunlin	5862	611	83	269	4062	836	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----
Dowitcher (sp. ?)	2608	**8	41	56	2500	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Stilt Sandpiper	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Semipalmated Sandpiper	898	5	6	587	----	300	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Western Sandpiper	497	121	34	17	3	322	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Marbled Godwit	10	----	----	----	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sanderling	608	309	69	47	8	175	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Am. Avocet	34	34	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Jaeger (sp. ?)	1	----	----	----	**1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gr. Bl.-backed Gull	270	233	12	4	1	----	----	9	3	8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Herring Gull	5355	3294	722	543	408	144	27	6	10	195	----	----	----	----	----	----	----	----	----	----	5	----	----	1	----	----	----	----
Ring-billed Gull	6721	2050	1400	668	456	134	133	288	351	612	----	----	----	----	203	36	----	*	----	----	378	*	----	12	----	----	----	----
Laughing Gull	125	----	72	----	1	21	----	----	30	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bonaparte's Gull	28	5	*	1	----	17	2	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Gull-billed Tern	3	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
[illegible]	[illegible]	----	[illegible]	47	[illegible]	[illegible]	----	[illegible]	3	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Tern	12	----	----	4	8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Least Tern	*1*	----	----	----	----	----	*1*	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Royal Tern	*17*	*6*	*1*	*4*	*1*	*3*	----	*2*	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Caspian Tern	*8*	----	----	1	----	7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Black Skimmer	163	2	*	2	150	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Razorbill	12	----	----	12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mourning Dove	4024	2	65	34	7	496	113	70	71	80	63	93	70	350	65	15	195	302	484	246	225	440	35	173	71	57	40	162
Ground Dove	6	----	----	----	----	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Barn Owl	4	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----	----
Screech Owl	14	----	----	1	3	1	1	----	----	----	----	----	----	----	----	----	----	----	7	----	1	----	----	----	----	----	----	----
Gr. Horned Owl	17	----	----	7	2	----	----	----	----	----	----	2	----	----	----	----	1	*	2	1	----	----	----	----	----	----	----	2
Barred Owl	20	----	1	2	3	2	----	----	----	----	----	----	----	1	----	----	1	4	4	----	1	1	----	----	----	*	----	----
Belted Kingfisher	360	2	82	20	104	37	18	4	8	15	1	5	----	2	2	----	6	11	9	4	5	2	----	6	2	1	1	13
Yel.-sh. Flicker	1400	40	17	70	143	306	42	45	30	109	32	17	11	5	30	24	120	100	110	44	41	27	1	11	4	1	4	16
Pileated Woodpecker	142	----	1	1	45	19	4	4	5	14	----	5	2	2	2	----	----	4	4	3	----	----	1	----	5	----	1	20
Red-bellied Woodpecker	570	5	3	9	59	35	5	11	3	16	6	18	6	3	4	10	60	95	104	40	23	35	3	9	3	1	----	4
Red-headed Woodpecker	86	----	1	5	----	3	----	4	----	----	1	2	----	----	2	3	14	14	4	4	24	5	----	----	----	----	----	----
Yel.-bel. Sapsucker	314	2	*	13	37	27	1	4	2	6	2	13	11	8	6	6	28	34	38	23	11	5	2	7	4	----	3	23
Hairy Woodpecker	133	1	1	1	5	9	3	2	1	3	1	1	3	----	3	1	12	19	17	8	12	8	1	1	3	*	----	17
Downy Woodpecker	462	4	----	2	33	16	8	16	1	18	7	9	5	4	16	6	40	59	75	42	17	34	3	9	9	1	2	26
Red-cock. Woodpecker	20	----	----	4	7	----	----	6	----	----	----	2	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eastern Kingbird	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Western Kingbird	----	----	**	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eastern Phoebe	116	----	4	8	13	12	2	5	2	10	2	5	3	1	5	----	3	9	5	----	6	3	----	1	2	1	3	11
Wood Pewee	4	----	----	----	----	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Horned Lark	247	----	----	----	----	----	----	----	----	----	63	----	----	----	----	----	----	----	65	10	40	21	11	23	12	----	1	1
Tree Swallow	310	----	----	2	----	----	289	----	19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Barn Swallow	1	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blue Jay	2081	----	16	94	268	80	----	108	22	72	42	17	8	17	92	35	260	108	293	112	106	161	9	25	13	18	40	65
Common Raven	9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	9
Common Crow	2577	5	6	33	246	349	300	9	26	76	6	13	*	4	32	8	102	120	298	77	185	67	16	43	19	91	25	421
Fish Crow	1004	----	23	65	78	729	100	5	2	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Car. Chickadee	1803	12	13	34	74	87	29	44	9	38	21	13	10	7	34	22	284	158	239	165	106	114	10	43	25	8	24	++180
Tufted Titmouse	911	1	*	21	22	14	4	21	----	46	18	25	4	6	18	10	137	105	137	81	33	79	10	13	8	5	20	73
White-br. Nuthatch	223	1	----	----	16	----	----	3	----	6	----	3	3	----	----	6	20	42	30	48	8	7	1	2	9	1	1	16
Red-br. Nuthatch	181	----	----	2	----	4	----	2	----	----	----	----	----	----	----	7	12	8	22	50	----	4	1	----	4	----	----	65
Brown-hd. Nuthatch	336	4	7	44	18	2	----	8	10	11	3	6	9	----	8	12	22	31	78	21	8	13	10	10	1	----	----	----
Brown Creeper	120	2	3	5	3	2	----	1	----	3	2	*	----	----	3	6	15	16	11	9	4	4	2	4	1	1	1	22
House Wren	23	1	----	5	6	2	----	1	2	1	----	1	----	----	----	----	3	----	----	----	----	----	----	----	----	----	----	1
Winter Wren	33	1	----	3	2	3	----	----	----	1	1	*	----	1	1	----	2	1	6	1	1	----	----	2	----	1	1	5
Bewick's Wren	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Carolina Wren	915	14	----	33	135	55	5	27	8	29	26	11	7	4	32	19	73	108	96	43	41	48	8	8	7	8	15	55
Long-bil. M. Wren	40	4	19	6	3	3	----	----	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Short-bil. M. Wren	6	1	----	2	1	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mockingbird	1802	25	47	81	71	105	44	44	37	55	14	35	13	11	57	28	217	96	280	126	133	127	9	28	24	3	28	64
Catbird	34	10	*	7	3	4	4	----	2	2	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Brown Thrasher	366	1	26	15	129	29	----	12	4	25	22	3	2	2	11	2	33	10	11	2	12	8	1	4	----	----	----	2
Robin	7782	134	83	236	277	583	1000	402	213	285	43	149	47	34	49	129	149	391	216	61	1320	206	60	506	10	3	47	1149
Hermit Thrush	125	2	*	7	33	11	----	----	----	1	----	*	4	1	1	2	8	16	11	----	9	3	----	2	1	8	----	5
Gray-ch. Thrush	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Eastern Bluebird	820	----	5	3	11	107	----	36	12	12	----	39	3	14	----	25	80	144	67	8	62	59	10	17	13	6	10	77
Bl.-gray Gnatcatcher	22	----	----	7	----	14	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Golden-cr. Kinglet	340	----	----	39	26	1	----	9	----	8	3	4	3	----	20	13	42	30	19	7	4	5	1	19	2	----	2	83
Ruby-cr. Kinglet	719	4	7	75	192	58	4	9	----	26	11	8	13	8	74	8	66	31	16	4	16	17	15	30	9	1	2	15
Water Pipit	151	----	----	50	55	10	----	1	----	12	----	----	2	----	----	----	----	----	9	2	6	----	----	4	----	----	----	----
Cedar Waxwing	1524	5	*	7	15	----	----	8	----	4	----	----	*	26	----	*	75	397	172	37	20	100	102	205	20	14	2	315
Log. Shrike	483	----	2	4	30	89	1	3	5	7	15	28	14	6	18	13	36	25	58	22	35	16	3	19	9	2	7	16
Starling	38369	135	176	490	323	190	2000	403	573	634	892	85	55	90	496	5345	1125	446	5477	13137	771	1882	150	519	200	1800	100	875
White-eyed Vireo	5	----	----	----	4	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Solitary Vireo	10	----	----	3	4	1	----	----	----	----	----	----	----	----	----	----	1	----	1	----	----	----	----	----	----	----	----	----
Bl.-and-wh. Warbler	3	----	----	----	1	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Orange-cr. Warbler	7	1	----	2	2	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Parula Warbler	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Myrtle Warbler	5255	463	186	696	378	542	2000	247	86	327	6	42	14	2	15	6	37	59	27	11	5	36	----	5	2	*	1	62
Bl.-th. Gray Warbler	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Yellow-throated Warbler	8	----	----	----	2	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pine Warbler	292	----	----	24	93	9	1	7	----	7	5	8	1	2	23	----	27	36	8	2	7	5	2	20	----	----	----	5
Palm Warbler	48	5	----	12	3	5	----	----	7	2	----	2	----	----	5	----	----	----	----	----	----	----	----	7	----	----	----	----
Yellowthroat	36	----	----	6	19	5	1	----	2	2	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Yellow-br. Chat	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hooded Warbler	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
House Sparrow	6470	30	71	182	5	9	32	259	156	149	424	75	5	295	431	172	1063	38	1378	308	515	152	15	346	44	18	150	148
E. Meadowlark	6447	55	62	150	464	941	1000	37	271	89	161	49	13	----	170	66	410	198	429	146	512	203	31	314	138	35	65	435
Red-wg. Blackbird	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Rusty Blackbird	4246	----	17	1	24	529	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	
Boat-tailed Grackle	1683	156	46	1048	118	315	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Common Grackle	27374	27	439	28	201	331	500	20	84	6620	146	227	7941	1	525	2	59	28	3278	6725	19	----	2	168	----	----	1	2
Br.-hd. Cowbird	1077	----	----	25	28	13	----	----	2	120	453	40	----	----	14	----	151	5	83	27	6	----	2	108	----	----	----	----
Scarlet Tanager	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----
Cardinal	3615	12	67	77	175	484	33	88	32	229	59	59	36	25	134	23	272	343	361	286	227	252	19	54	45	4	60	159
Rose-br. Grosbeak	2	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Painted Bunting	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dickcissel	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Evening Grosbeak	840	1	----	----	----	----	----	25	----	----	16	2	----	----	*	10	152	87	----	----	1	6	----	----	----	----	----	540
Purple Finch	1889	4	*	5	2	----	----	1	----	85	41	9	----	3	14	58	208	442	270	319	43	186	----	1	5	11	35	147
Common Redpoll	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	5
Pine Siskin	5766	1	----	----	----	----	----	----	----	----	----	----	----	----	22	----	143	144	345	203	----	95	----	----	----	----	----	4813
Am. Goldfinch	2683	29	12	147	190	31	7	36	----	48	7	6	33	20	36	24	142	106	770	289	17	111	15	289	11	7	37	263
Red Crossbill	202	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	202
White-wg. Crossbill	*	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	*
Ruf.-sided Towhee	1695	18	49	54	234	58	3	44	39	59	27	18	10	12	78	22	212	109	164	113	76	162	12	32	5	12	25	48
Ipswich Sparrow	2	----	----	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Savannah Sparrow	1380	36	81	193	32	72	1	44	145	80	133	44	2	----	327	----	49	7	28	5	4	30	----	56	----	1	5	5
Grasshopper Sparrow	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	----	----	----	----	----	----
Henslow's Sparrow	4	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	3	----	----	----	----	----	----	----	----	----	----
Sharp-tailed Sparrow	36	4	23	4	1	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Seaside Sparrow	101	1	57	18	15	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Vesper Sparrow	141	----	----	17	21	31	----	----	----	----	1	----	4	7	3	----	6	----	----	----	----	----	----	46	----	1	4	----
Bachman's Sparrow	3	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Slate-colored Junco	6113	2	29	15	91	90	10	312	38	251	62	110	102	33	80	113	843	470	1030	481	302	553	65	182	132	29	45	643
Chipping Sparrow	475	----	----	11	118	118	----	65	----	11	12	23	----	26	2	----	12	30	----	----	----	30	----	----	1	----	15	1
Field Sparrow	1933	1	5	49	24	89	2	14	114	10	30	21	6	6	46	1	258	60	415	172	102	122	14	183	12	9	64	104
White-cr. Sparrow	59	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	2	8	2	1	----	----	29	2	----	12	3
White-thtd. Sparrow	4337	9	138	154	398	203	6	147	2	115	41	105	36	67	165	78	536	388	452	168	138	220	3	223	106	39	100	300
Fox Sparrow	283	10	74	10	----	10	1	3	3	33	9	3	7	----	2	2	25	26	12	----	----	43	----	----	1	9	----	----
Lincoln's Sparrow	1	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Swamp Sparrow	651	7	1	51	159	6	10	5	12	38	----	45	2	----	149	2	24	17	78	10	2	4	----	18	----	----	2	9
Song Sparrow	2217	27	21	53	225	92	15	4	39	91	24	32	11	5	----	5	240	235	409	127	45	119	6	71	29	18	100	174
Snow Bunting	2	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Total Number Species	215	109	93	145	153	149	85	72	62	89	64	72	52	50	64	51	85	73	83	67	78	63	43	70	53	44	47	71
Total Number Individuals	366712	15100	6299	10137	+35611	25463	117546	4789	9009	17237	3291	2931	9049	1333	4721	6572	9042	6147	18862	28560	6267	6429	677	4719	1414	2254	1157	12096

*Seen in area during count period but not on count day. (Not included in total number of species.)

**See text.

+Includes approximately 5,000 "peeps" which are not listed in table or counted in total number of species.

++Includes some Black-capped Chickadees.

CHRISTMAS BIRD COUNT --- 1965		COAST					COASTAL PLAIN									PIEDMONT												MTN
	Individual Totals	Bodie-Pea Island, Dare Co., N. C.	Morehead City, Carteret Co., N. C.	Wilmington, N. C.	Charleston, S. C.	Hilton Head Island, S. C.	Mattamuskeet National Wildlife Refuge, Hyde Co., N. C.	Beaufort Co., N. C.	Pamlico Co., N. C.	New Bern, N. C.	Rocky Mount, N. C.	Wayne Co., N. C.	Dillon, S. C.	Eastover, S. C.	Columbia, S. C.	Henderson, Vance Co., N. C.	Raleigh, N. C.	Chapel Hill, N. C.	Greensboro, N. C.	Winston-Salem, N. C.	Stanly Co., N. C.	Charlotte, N. C.	Greenville, S. C.	Anderson Co., S. C.	Elkin, N. C.	North Wilkesboro, N. C.	Caldwell Co., N. C.	Great Smoky Mtn. National Park, Tenn. - N. C.
Short-bil. M. Wren	6	1	----	2	1	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Mockingbird	1802	25	47	81	71	105	44	44	37	55	14	35	13	11	57	28	217	96	280	126	133	127	9	28	24	3	28	64
Catbird	34	10	*	7	3	4	4	----	2	2	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1
Brown Thrasher	366	1	26	15	129	29	----	12	4	25	22	3	2	2	11	2	33	10	11	2	12	8	1	4	----	----	----	2
Robin	7782	134	83	236	277	583	1000	402	213	285	43	149	47	34	49	129	149	391	216	61	1320	206	60	506	10	3	47	1149
Hermit Thrush	125	2	*	7	33	11	----	----	----	1	----	*	4	1	1	2	8	16	11	----	9	3	---	2	1	8	----	5
Gray-ch. Thrush	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Eastern Bluebird	820	----	5	3	11	107	----	36	12	12	----	39	3	14	----	25	80	144	67	8	62	59	10	17	13	6	10	77
Bl.-gray Gnatcatcher	22	----	----	7	----	14	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Golden-cr. Kinglet	340	----	----	39	26	1	----	9	----	8	3	4	3	----	20	13	42	30	19	7	4	5	1	19	2	----	2	83
Ruby-cr. Kinglet	719	4	7	75	192	58	4	9	----	26	11	8	13	8	74	8	66	31	16	4	16	17	15	30	9	1	2	15
Water Pipit	151	----	----	50	55	10	----	1	----	12	----	----	2	----	----	----	----	----	9	2	6	----	---	4	----	----	----	----
Cedar Waxwing	1524	5	*	7	15	----	----	8	----	4	----	----	*	26	----	*	75	397	172	37	20	100	102	205	20	14	2	315
Log. Shrike	483	----	2	4	30	89	1	3	5	7	15	28	14	6	18	13	36	25	58	22	35	16	3	19	9	2	7	16
Starling	38369	135	176	490	323	190	2000	403	573	634	892	85	55	90	496	5345	1125	446	5477	13137	771	1882	150	519	200	1800	100	875
White-eyed Vireo	5	----	----	----	4	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Solitary Vireo	10	----	----	3	4	1	----	----	----	----	----	----	----	----	----	----	1	----	1	----	----	----	---	----	----	----	----	----
Bl.-and-wh. Warbler	3	----	----	----	1	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Orange-cr. Warbler	7	1	----	2	2	1	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Parula Warbler	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Myrtle Warbler	5255	463	186	696	378	542	2000	247	86	327	6	42	14	2	15	6	37	59	27	11	5	36	---	5	2	*	1	62
Bl.-th. Gray Warbler	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Yellow-throated Warbler	8	----	----	----	2	6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Pine Warbler	292	----	----	24	93	9	1	7	----	7	5	8	1	2	23	----	27	36	8	2	7	5	2	20	----	----	----	5
Palm Warbler	48	5	----	12	3	5	----	----	7	2	----	2	----	----	5	----	----	----	----	----	----	----	---	7	----	----	----	----
Yellowthroat	36	----	----	6	19	5	1	----	2	2	----	1	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Yellow-br. Chat	1	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Hooded Warbler	1	----	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
House Sparrow	6470	30	71	182	5	9	32	259	156	149	424	75	5	295	431	172	1063	38	1378	308	515	152	15	346	44	18	150	148
E. Meadowlark	6447	55	62	150	464	941	1000	37	271	89	161	49	13	----	170	66	410	198	429	146	512	203	31	314	138	35	65	435
Red-wg. Blackbird	35563	96	842	1567	971	[illegible]	10000	1894	5880	[illegible]	73	110	471	170	1078	174	240	38	21	2175	[illegible]	108	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	----	14	----	[illegible]	47	[illegible]	*	----	----	4	15	9	----	----	17	3	---	----	----	----	----	----
Rusty Blackbird	4240	----	17	1	24	[illegible]	----	----	----	40	120	726	103	----	2	----	----	131	81	2150	223	16	---	64	----	2	----	8
Brewer's Blackbird	1	----	----	----	*	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	---	----	----	----	----	----
Boat-tailed Grackle	1683	156	46	1048	118	315	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Common Grackle	27374	27	439	28	201	331	500	20	84	6620	146	227	7941	1	525	2	59	28	3278	6725	19	----	2	168	----	----	1	2
Br.-hd. Cowbird	1077	----	----	25	28	13	----	----	2	120	453	40	----	----	14	----	151	5	83	27	6	----	2	108	----	----	----	----
Scarlet Tanager	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	1	----	----	----	----	---	----	----	----	----	----
Cardinal	3615	12	67	77	175	484	33	88	32	229	59	59	36	25	134	23	272	343	361	286	227	252	19	54	45	4	60	159
Rose-br. Grosbeak	2	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	1
Painted Bunting	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Dickcissel	2	----	----	----	----	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Evening Grosbeak	840	1	----	----	----	----	----	25	----	----	16	2	----	----	*	10	152	87	----	----	1	6	---	----	----	----	----	540
Purple Finch	1889	4	*	5	2	----	----	1	----	85	41	9	----	3	14	58	208	442	270	319	43	186	---	1	5	11	35	147
Common Redpoll	5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	5
Pine Siskin	5766	1	----	----	----	----	----	----	----	----	----	----	----	----	22	----	143	144	345	203	----	95	---	----	----	----	----	4813
Am. Goldfinch	2683	29	12	147	190	31	7	36	----	48	7	6	33	20	36	24	142	106	770	289	17	111	15	289	11	7	37	263
Red Crossbill	202	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	202
White-wg. Crossbill	*	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	*
Ruf.-sided Towhee	1695	18	49	54	234	58	3	44	39	59	27	18	10	12	78	22	212	109	164	113	76	162	12	32	5	12	25	48
Ipswich Sparrow	2	----	----	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Savannah Sparrow	1380	36	81	193	32	72	1	44	145	80	133	44	2	----	327	----	49	7	28	5	4	30	---	56	----	1	5	5
Grasshopper Sparrow	2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	2	----	----	---	----	----	----	----	----
Henslow's Sparrow	4	----	----	----	1	----	----	----	----	----	----	----	----	----	----	----	----	3	----	----	----	----	---	----	----	----	----	----
Sharp-tailed Sparrow	36	4	23	4	1	4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Seaside Sparrow	101	1	57	18	15	10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Vesper Sparrow	141	----	----	17	21	31	----	----	----	----	1	----	4	7	3	----	6	----	----	----	----	----	---	46	----	1	4	----
Bachman's Sparrow	3	----	----	----	3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Slate-colored Junco	6113	2	29	15	91	90	10	312	38	251	62	110	102	33	80	113	843	470	1030	481	302	553	65	182	132	29	45	643
Chipping Sparrow	475	----	----	11	118	118	----	65	----	11	12	23	----	26	2	----	12	30	----	----	----	30	---	----	1	----	15	1
Field Sparrow	1933	1	5	49	24	89	2	14	114	10	30	21	6	6	46	1	258	60	415	172	102	122	14	183	12	9	64	104
White-cr. Sparrow	59	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	2	8	2	1	----	---	29	2	----	12	3
White-thtd. Sparrow	4337	9	138	154	398	203	6	147	2	115	41	105	36	67	165	78	536	388	452	168	138	220	3	223	106	39	100	300
Fox Sparrow	283	10	74	10	----	10	1	3	3	33	9	3	7	----	2	2	25	26	12	----	----	43	---	----	1	9	----	----
Lincoln's Sparrow	1	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Swamp Sparrow	651	7	1	51	159	6	10	5	12	38	----	45	2	----	149	2	24	17	78	10	2	4	---	18	----	----	2	9
Song Sparrow	2217	27	21	53	225	92	15	4	39	91	24	32	11	5	----	5	240	235	409	127	45	119	6	71	29	18	100	174
Snow Bunting	2	1	----	1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----
Total Number Species	215	109	93	145	153	149	85	72	62	89	64	72	52	50	64	51	85	73	83	67	78	63	43	70	53	44	47	71
Total Number Individuals	366712	15100	6299	10137	+35611	25463	117546	4789	9009	17237	3291	2931	9049	1333	4721	6572	9042	6147	18862	28560	6267	6429	677	4719	1414	2254	1157	12096

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*Seen in area during count period but not on count day. (Not included in total number of species.)

**See text.

+Includes approximately 5,000 "peeps" which are not listed in table or counted in total number of species.

++Includes some Black-capped Chickadees.

CHRISTMAS BIRD COUNT—1965

ELOISE F. POTTER

A record-breaking 215 species were identified by participants in the 1965 Christmas Bird Count in North and South Carolina. Among the 215 species, 19 more than the previous high of 196 recorded in 1963, was a Black-throated Gray Warbler. James F. Parnell and Maurice Barnhill found the western warbler at Orton Plantation during the Wilmington count. This apparently constitutes the first sight record for the species in North Carolina.

Two distinct impressions emerge from even a casual study of the present count table: (1) observers found an unusually large number of birds which normally spend the winter far south of the Carolinas, and (2) northern finches are even more abundant this winter than in the excellent finch winter of 1963-1964. The total number of individuals of all species is only 366,712 – over 100,000 less than last year and over 3 million less than in the 1963 Christmas Count. The difference lies in the number of Starlings, Red-winged Blackbirds, and Common Grackles listed. At Anderson, S.C., the major blackbird roost was destroyed by cutting of the bamboo patches (*Chat,* 29:16). Other compilers have not mentioned similar habitat changes, but it is not unlikely that in urban areas the blackbirds have been forced to move their roosts outside the count circles. The Greensboro compiler noted the total absence of the Common Grackle on the count day; but the Winston-Salem compiler commented on an increase in the Starling and blackbird count. Although there has been a drastic reduction in the numbers of blackbirds listed in the 1964 and 1965 counts, there is no evidence that these figures represent an actual decline in winter blackbird populations in the Carolinas.

The 1965 Christmas Bird Count has reports from 27 localities, including the Bodie-Pea Island area of Dare County, N.C., which has not been censused in recent years. The 400 observers in 131 parties covered their areas in a total of 1,055 party-hours and traveled approximately 4,500 party-miles by car, boat, bike, and foot. The weather on count days was generally mild with early morning temperatures ranging from just barely below freezing to the mid-50s. High temperatures ranged from the mid-40s to the mid-70s. There was no severely cold weather during the count period, nor during the preceding fall months. This extremely mild weather may explain the presence of many lingering fall migrants. See the local count summaries for comments on these and other unusual sight records.

Between the mild weather and the long list of lingering fall migrants, it is surprising to note that the northern finch count for 1965 exceeds that of the 1963 Christmas Count. The same trend is evident in the figures for the Red-breasted Nuthatch, as can be seen in the table below.

	1963	1964	1965
Observers/Parties	286/100	388/122	400/131
Red-breasted Nuthatch	146	12	181
Evening Grosbeak	284	11	840
Purple Finch	863	204	1,889
Redpoll	30	(5)*	5
Pine Siskin	3,348	16	5,766
Red Crossbill	89	none	202
White-winged Crossbill	34	none	(40)*

*Seen in area during count period but not on count day.

Following the 1965 Spring Count, B.R. Chamberlain (*Chat,* 29:64-65) commented on the apparent upward trend in the Eastern Bluebird population, which was greatly reduced by severe weather in the winter of 1957-1958.

During the 1965 Christmas Count period the outlook remained good for the bluebird with 820 individuals being reported as compared with 574 in 1964 and 373 in 1963. However, many observers are deeply concerned about the effects of the blizzard of late January 1966 upon the bluebird. No doubt many birds perished as a result of that storm, but as of this writing the extent of losses among the bluebirds cannot be determined.

Anderson County, S.C. (all points within a 15-mile diameter circle centered at Anderson Airport).—26 Dec.; 6:15 AM to 5:45 PM. Clear; temp. 28 F to 45 F; wind SW, 0-4 mph. Five observers in 2 parties. Total party-hours, 15.75 (4.75 by car, 11 on foot); total party-miles, 165 (158 by car, 7 on foot). **Total species, 70; total individuals, 4,719.** The **Common Loon, Horned Grebe,** and **Dunlin** (AT, CT) were found at different places on Hartwell Lake. The Dunlin had a broken leg but was capable of flight. **Robins** were found in a winter roost. All **Rufous-sided Towhees** were red-eyed.—Rachel Blanton, Adair Tedards (compiler), Connor Tedards, Douglas Tedards, Caroline Watson.

Beaufort County, N.C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County, including both sides of the river from Bath to Washington).—2 Jan.; 7:00 AM to 5:30 PM. Partly cloudy to overcast, warm, occasional drizzle; temp. 51 F to 75 F; wind SW, 0-17 mph, occasional gusts to 25 mph. Nine observers in 3 parties. Total party-hours, 27 (16 by car, 11 on foot); total party-miles, 118 (104 by car, 14 on foot). **Total species, 72; total individuals, 4,789. Royal Terns** were further up river than compiler had seen them before at this time of year. Waterfowl are scarce. There were 360 Whistling Swans here a few days before our count.—Ethel Barkley, Ruth Brown, Geraldine Cox (compiler), Rodney Dees, James McLaurin, Mary McLaurin, Nathan Miller, Louise Satterthwaite, Melvin Whitley.

Bodie-Pea Island, Dare County, N.C. (all points within a 15-mile diameter circle centered 2.7 miles SSE of the Bodie Island Lighthouse, to include the southern tip of Bodie Island, northern half of the Pea Island National Wildlife Refuge, Wanchese section of Roanoke Island).—28 Dec.; 6:45 AM to 5 PM. Clear with high winds; temp. 31 F to 48 F; wind NE, 18-30 mph. Five observers in 2 parties. Total party-hours, 20.5 (2.5 by car, 18 on foot); total party-miles, 82 (72 by car, 10 on foot). **Total species, 109; total individuals, 15,100.** The 8 **Brown Pelicans** (RJH, HLJ, PHW) were somewhat north of the winter range for this species. **Piping Plovers**, 28, (RJH, HLJ, PHW) were observed in three separate groups. **Short-billed Dowitchers**, 8, (HAH, PWS) were identified by field marks and call. The 34 **American Avocets** are a portion of a large flock that was present in the area all fall. The one **Evening Grosbeak** was found in the town of Wanchese. The **Lincoln's Sparrow** was observed at close range in good light on Pea Island (RJH, HLJ, PHW). Jones is familiar with the species, having seen a number several weeks earlier on a trip to Texas.—R.J. Hader, H.A. Hespenheide, H.L. Jones, P.W. Sykes Jr. (compiler), P.H. Warren.

Caldwell County, N.C. (all points within a 15-mile diameter circle centered at Lenoir).—1 Jan.; 7:30 AM to 4:00 PM. Sunny, warm, still; temp. 37 F to 60 F. Eleven observers in 4 parties, 1 individual working own yard. Total party-hours, 28 (19 by car, 9 on foot); total party-miles, 161 (147 by car, 14 on foot). **Total species, 47; total individuals, 1,157.**—Mrs. J.B. Bernard, Margaret Harper (compiler), C.G. Hughes, Mrs. C.G. Hughes, E.M. Manchester, Mrs. E.M. Manchester, Fred May, Mrs. Fred May, Tom Parks, Mrs. Jas. H. Seegars, Mrs. C.S. Warren, Mrs. Dickson Whisnant.

Chapel Hill, N.C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin Streets).—2 Jan.; 7 AM to 5 PM. Clear and mild; temp. 56 F to 73 F; wind light. Forty observers in 8 parties, 4 individuals working own yards. Total party-hours, 44 (10 by car, 34 on foot); total party-miles, 123 (90 by car, 33 on foot). **Total species, 73; total individuals, 6,147.** The **Scarlet Tanager** (AW, SL, MS, EW) has apparently never been reported previously at this season in our locality. An adult male in winter plumage, the bird was olive-green above and yellow-green below with black tail and wings. The bird was heard in full song, and it was followed for some distance along a thicket of wild crabapple and bamboo. The **Henslow's Sparrows** were discovered in a brushy area alongside creek water. Observations were made at leisure by several observers before and during the count. [See *Chat,* **26**:53 for comments on the status of this species in the Carolinas—Ed.]—C. Dale Beers, Charles Blake, David Barnes, Louise Crumpacker, Bill and Dan Dye, John and Bruce Filley, Ashby and Susan Fristoe, Claude George, Francis and Jean Harper, Alexander Hull, Logan and Elnia Irvin, Bee Lemen, Stella Lyons, Fred Mattis, Lee Morrison, Mrs. W.D. Patterson, Mrs. J.A. Payne, Fred Poisson, Robert and Elizabeth Powell, Wiley Sanders, Don and Wendy Seanor, Robert and Mildred Sharpe, Jean Stewart, Wilma Stuart, M.L. Taliaferro, Robert and Elizabeth Teulings (compilers), Adelaide Walters, Josephine Weedon, Edmund Welch, David and Geiger Yount.

Charleston, S.C. (all points within a 15-mile diameter circle centered 14 miles N.E. of Mt. Pleasant and ½ mile E of U.S. Hwy 17).—2 Jan.; 4 AM to 5 PM. Clear in morning, partly overcast in afternoon; temp. 55 F to 75 F; wind variable, 5-17 mph. Thirty observers in 9 parties. Total party-hours, 65.75 (11 by car, 9.25 by boat, 45.5 on foot); total party-miles, 301 (176 by car, 73.5 by boat, 51.5 on foot). **Total species, 153; total individuals, 35,611.** Shearwater and jaeger found within 2 miles of beach, but neither identification specifically positive; former thought to be Cory's and latter Pomarine. **Stilt Sandpiper** is first mid-winter record for area. **Gray-cheeked Thrush** has been recorded for at least the last three winters.—Mary Armstrong, Roy Baker, Connie Baker, Francis Barrington, Louise Barrington, Ted Beckett, Edwin Blitch, Carolyn Blitch, Rhett Chamberlain, David Chamberlain, Norman Chamberlain, Burnham Chamberlain (compiler), Ruth Clements, E.C. Clyde, Wilhelmina Coleman, Ernest Cutts, John Dick, Devin Garrity, Julian Harrison, John Horlbeck, Stanley Langston, Peter Manigault, George Maxwell, Ted Metcalf, John Metcalf, Nell Prior, Anne Richardson, Elizabeth Simons, Dory Smith, Arthur Wilcox.

Charlotte, N.C. (all points within a 15-mile diameter circle centered at intersection of 7th Street and Briar Creek as in past 23 years).—31 Dec.; 5:00 AM to 5:30 PM. Heavy ground fog to 10:00 AM, then clear; temp. 42 F to 67 F; wind SW, 0-15 mph. Twenty-one observers in 9 parties, 3 individuals working own yards. Total party-hours, 49.5 (14.5 by car, 35 on foot); total party-miles, 204.5 (177 by car, 27.5 on foot). **Total species, 63; total individuals, 6,429.** The immature **Yellow-crowned Night Heron** (JHL) was also seen 29 December along a creek in the observer's backyard. Failure to find a **Common Grackle** was the surprise of the day. This is the best Christmas Count recorded in the 23 years it has been accomplished in Charlotte.—William L. Anderson Jr., John Anderson, Mrs. J.P. Armstrong, Mrs. Douglas Booth, Mrs. Edwin O. Clarkson, Dr. and Mrs. W.G. Cobey, Mrs. Harold Dillehay, Mr. and Mrs. A.H. Dykema, Dr. E.S. Godsey, J.P. Hamilton, Mrs. Anna B. Jewell, Mrs. A.A. Kittinger, Dr. J.H. Lovell, Mrs. Clinton McKay, Joseph R. Norwood (compiler), Mrs. Joseph R. Norwood, Douglas Pratt, Mrs. George C. Potter, Mark Simpson, Jr., William Smith, Dr. Frederick H. Taylor, Mrs. Ruth L. Whyte (Mecklenburg Audubon Club, guests).

Columbia, S.C. (all points within a 15-mile diameter circle centered at intersection of Gill's Creek and Bluff Road, a change from previous years.)—27 Dec.; 7:00 AM to 5:15 PM. Clear, dry underfoot due to lack of rainfall in recent months; temp. 25 F to 52 F; wind ENE, 4-7 mph. Eight observers in 3 parties. Total party-hours, 26 (17 by car, 9 on foot); total party-miles, 82 (64 by car, 18 on foot). **Total species, 64; total individuals, 4,721.** The new count area excludes recently urbanized area NW of State House and adds property S of city to Calhoun County line and E to edge of Hopkins, S.C.—Gilbert Bristow (compiler), Mrs. Sanders Guignard, Mrs. Theo Hartin, Helen Kendall, Johnny Kinsey, Jud Kinsey, Kay Sisson, Emma Walker.

Dillon, S.C. (all points within a 15-mile diameter circle centered at Dillon County Courthouse, same as 1964).—27 Dec.; 7:00 AM to 5:30 PM. Sunny, calm; temp. 32 F to 46 F. Two observers in 1 party. Total party-hours, 9.5 (2 by car, 7.5 on foot); total party-miles, 95 (90 by car, 5 on foot). **Total species, 52; total individuals, 9,049.** Both white-eyed and red-eyed Rufous-sided Towhees were seen, but count was not taken of relative abundance. Both are common local residents.—Arch McCallum (compiler), M.R. McCallum Jr.

Eastover, S.C. (all points within a 15-mile diameter circle centered at Eastover).— 31 Dec. Too warm, heavy fog to clear to cloudy; temp. 54 F to 75 F; wind SW, 5-8 mph. Three observers in 1 party. Total party-hours, 6 (4 by car, 2 on foot). **Total species, 50; total individuals, 1,333.**—Mrs. W.T. Beck, Annie R. Faver (compiler), Kay Sisson.

Elkin, N.C. (all points within a 15-mile diameter circle centered at Elkin).—26 Dec.; 8:00 AM to 5:00 PM. Partly cloudy, mostly fair; temp. 28 F to 45 F; wind from N, 10-25 mph, strongest in morning. Seven observers in 2 parties, 2 individuals working own yards. Total party-hours, 14 (4 by car, 10 on foot); total party-miles, 76 (55 by car, 21 on foot). **Total species, 53; total individuals, 1,414.**—T.R. Bryan, J.H. Click, Lin Hendren (compiler), Ola Hendren, Clara Henderson, E.M. Hodel, Jerry Tysinger.

Great Smoky Mountains National Park, Tenn.-N.C. (all points within a 15-mile diameter circle centered on Bull Head of Mt. LeConte, same general area as in 1937-1956 and 1962 to date).—2 Jan.; 7:00 AM to 5:30 PM. Partly cloudy, overcast, rain with dense fog at higher elevations; temp. 44 F to 70 F; wind variable, 5-40 mph, with gusts to 50 mph. Thirty-three observers in 15 parties. Total party-hours, 109 (42 by car, 67 on foot); total party-miles, 314 (232 by car, 82 on foot). **Total species, 71; total individuals, 12,096. Peregrine Falcon** (JC) was seen in flight at Indian Gap. Species has been observed in 11 of the 24 Christmas counts in this area, but this is first time since 1955. **House Wren** (GW), observed at Elkmont Campground, was recorded on only 3 of 23 previous counts. **Catbird** (GW) at Elkmont was probably same bird observed by De Foe on 23 December 1965; only one record in 23 previous counts. Both **Brown Thrashers** (WBW) were seen at Greenbrier; species observed on 3 of 23 previous counts. **Robin** count (1,149) exceeds previous high of 300 recorded in 1953. **Cedar Waxwing** count (315) exceeds previous high of 79 recorded in 1962. **Pine Warblers** (1 at Pigeon Forge, JT and JH; 3 at Buckhorn, AS; 1 on Alum Cave Bluff Trail, GW) were reported on only 2 of 23 previous counts. **Eastern Meadowlark** count (435) exceeds previous high of 142 recorded in 1962. The **Rusty Blackbirds** were at Pigeon Forge and Wears Valley; species recorded only 3 times in 23 previous counts. The male **Rose-breasted Grosbeak** (LN) was at Elkmont. A female of this species was mist-netted, banded, and photographed by De Foe within 1 mile of count observation on 9 December 1965. **Evening Grosbeak** count (540) exceeds previous high of 75 recorded in 1955. This is only the sixth count in which the species has been reported. **Common Redpolls** (ME) were in Sugarlands area about 2 miles S of park headquarters. In spite of the fact this species has not previously been reported in Great Smoky Mountains National Park, this is the second record this winter. On 14 December 1965 De Foe (and 5 others) observed a single bird at Sugarlands Visitor Center. It was feeding with a flock of about 200 to 250 Pine Siskins. **Pine Siskin** count (4,813) exceeds previous high of 2,800 recorded in 1963. **Chipping Sparrow** (RB, SB) was on Alum Cave Bluff Trail; species reported only once in 23 previous counts. **White-crowned Sparrow** (GW) was at Elkmont; species reported only twice in 23 previous counts. The **American Woodcock** was reported at Elkmont by Ranger Larry Hanneman, an experienced hunter. As many as 40 **White-winged Crossbills** were seen on a single day in highest elevations of the park during count period by Campbell and De Foe; but none could be located on count day.— Ross Bender, Steve Bender, Lowell Branham, Mr. and Mrs. James Campbell, Donald De Foe (compiler), Jessie Dempster, Danny Ellis, John Elson, Mary Enloe, Joseph Howell, Susan Hoyle, Lura James, Beth Lacy, Henry Lix, Mrs. George McGown, Stanleigh Meaker, Mr. and Mrs. Robert Monroe, Pat Nelson, Louise Nunnally, Holly Overton, Paul Pardue, Ed Smith, Mr. and Mrs. Louis Smith, Mr. and Mrs. Arthur Stupka, James Tanner, Mr. and Mrs. W.B. Williams, Mr. and Mrs. George Wood (Tennessee Ornithological Society, National Park Service, and guests).

Greensboro, N.C. (all points within a 15-mile diameter circle centered at WBIG Transmitter).—1 Jan.; 5:30 AM to 5:30 PM. Bright sun; temp. 40 F to 72 F. Forty-one observers in 11 parties, 2 individuals working own yards. Total party-hours, 93 (35 by car, 58 on foot); total party-miles, 395 (341 by car, 54 on foot). **Total species, 83; total individuals, 18,862. Least Bittern** (JC) was seen in marsh at 20 feet. **Solitary Vireo** (LC, TS) was heard singing.— John Austin, Rose Avery, Helen Bedon, John Carr, Mrs. F.H. Craft, Larry Crawford, Ellene Cobb, Inez Coldwell, Mr. and Mrs. G.W. Daniel, Charlotte Dawley, Mrs. R.D. Douglas, Charlotte DuBois, Jean Gertz, Haward Groover, Elizabeth Heilig, Mrs. Darald Kirk, Mrs. Clarence Knight, Robert Lasley, Lena Marshburn, James Mattocks, Jean McCoy, Ethel McNairy, Ida Mitchell, Elizabeth Ogburn, Mrs. David Parsons, Penny Parsons, Mrs. George Perritt, George Ralls, Etta Schiffman, Virginia Seawell, A.D. Shaftesbury, Ruth Sikes, George A. Smith (compiler), Mrs. W.F. Smyre, Tom Street, Mrs. C.R. Surratt, Joan Tipton, Margaret Y. Wall, Mrs. R.H. Weisner, Mrs. V.J. Wycoff.

Greenville, S.C. (all points within a 15-mile diameter circle centered at intersection of Hwy 291 and 29).—1 Jan.; 8:00 AM to 5:30 PM. Cloudy, mild; low temp. 53 F; wind about 5 mph. Seven observers in 2 parties. Total party-hours, 17. **Total species, 43; total individuals, 677.**—Mrs. W.B. Lawrence, May Puett, Ruth Gilreath, Mrs. John Howell, Lillie Hart, Gladys Hart, Rosa Lee Hart (compiler).

Henderson, Vance Co., N.C. (all points within a 15-mile diameter circle centered at Henderson).—31 Dec., 8:15 AM to 5:00 PM. Mild; temp. 47 F to 68 F; wind SW, 7 mph. Nine observers in 1 party, 2 individuals working own yards. Total party-hours, 8 (2.5 by car, 5.5 on foot); total party-miles, 56 (46 by car, 10 on foot). **Total species, 51; total individuals, 6,572.**—Mr. and Mrs. A.W. Bachman, Sarah Boyd, Annie Gray Burroughs, Beryle Flannagan, Mariel Gary, May Hunter (compiler), Garnette Myers, Mike Stewart, Mr. and Mrs. Paul Stewart.

Hilton Head Island, Beaufort Co., S.C. (all points within a 15-mile diameter circle centered at Hilton Head Island Post Office, including Hilton Head Island, Pinckney Island, Colleton Neck and parts of Bluffton, S.C.).—29 Dec.; 6 AM to 6 PM. Warm, overcast with scattered sunshine; temp. 40 F to 68 F; wind NE to E, 5-15 mph. Thirty-two observers in 8 parties. Total party-hours, 73 (19 by car, 2 by bike, 52 on foot); total party-miles, 227 (175 by car, 8 by bike, 44 on foot). **Total species, 149; total individuals, 25,473. Cattle Egret** (AH, AJ) was seen daily throughout count period. **Oldsquaw** (DH, VH) was seen with scope in good light. **Pectoral Sandpiper** (MC) was seen with scope and studied carefully with other peeps. Other species among an unusually large number of lingering fall migrants were **Eastern Kingbird** (JJ), **Wood Pewee** (DH, VH, AH, AJ), **Parula Warbler** (VD, CSS, MM), **Hooded Warbler** (ML), **Painted Bunting** (DH, VH, BP), and **Dickcissel** (IT, LD).—Mr. and Mrs. W.H. Branch, Mrs. Wallace Butler, Dr. and Mrs. Maurice Charnock, Dr. Lester Davenport, Mrs. John Duane, Mrs. Fred Hack, Miss Avery Hack, David Harrall, Virginia Harrall, Mrs. Alva Hines, Edith Inglesby, Charlotte Inglesby, Arlene Jones, Mr. and Mrs. Jack Jordan, Henry Lawrence, Mildred Lawrence, Imogene Lowden, E.O. Mellinger, Marie Mellinger, Caroline Newhall (compiler), Dr. and Mrs. Bill Pitcairn, Anne Reddy, Marie Reddy, Mr. and Mrs. C. S. Sergeant, Ivan Tomkins, I.T. Wetzel, Jonathan Wetzel.

Mattamuskeet National Wildlife Refuge, Hyde Co., N.C. (all points within a 15-mile diameter circle centered at Mattamuskeet Lodge and including most of Mattamuskeet Refuge and portions of Swanquarter Refuge).—26 Dec.; 6:00 AM to 6:00 PM. Temp. 41 F to 65 F; wind 10-15 mph. Twelve observers in 3 parties. Total party-hours, 12 (8 by car, 4 on foot); total party-miles, 149 (144 by car, 5 on foot). **Total species, 85; total individuals, 117,546.**—Ethel S. Barkley, Willie G. Cahoon (compiler), Geraldine Cox, Mr. and Mrs. J.L. McLaurin, Robert G. Prescott Jr., Mr. and Mrs. Hugh Sterling, Hal G. Swindell Jr., Frances Waters, Melvin Whitley, Mitchell Whitley.

Morehead City, Carteret Co., N.C. (all points within a 15-mile diameter circle centered at Crab Point intersection).—27 Dec.; 6:00 AM to 4:00 PM. Cold, windy; temp. 29 F to 46 F; wind N, 15-25 mph. Four observers in 3 parties. Total party-hours, 24 (18 by car, 6 on foot); total party-miles, 138 (125 by car, 13 on foot). **Total species, 92; total individuals, 6,299.** A **Western Kingbird** (DB, JF III, TW) was found at Emerald Isle, about 5 miles W of count area, on 28 December and was still present 9 January.—David Barnes, John Fussell II, John Fussell III (compiler), Tommy Wade.

New Bern, N.C. (all points within a 15-mile diameter circle centered at New Bern Airport, to include Neuse River from mouth of Broad Creek to Streets Ferry, New Bern, Trent River to Hardison Farm).—2 Jan; 7:00 AM to 5:00 PM. Clear in morning to overcast in afternoon; temp. 50 F to 74 F; wind SSW, 5-15 mph. Eight observers in 5 parties, 2 individuals working own yards. Total party-hours, 34 (6 by car, 1 by boat, 27 on foot); total party-miles, 98 (70 by car, 10 by boat, 18 on foot). **Total species, 89; total individuals, 17,237.**—Joel Clark, Fred Conderman, Margaret Conderman, Allen Connelly, Robert Holmes (compiler), J. Alex Meadows, Tom Sherratt, Sam Sweeny.

North Wilkesboro, N.C. (all points within a 15-mile diameter circle centered at North Wilkesboro)—23 Dec.; 7:00 AM to 4:00 PM. High cloudiness; temp. 30 F to 54 F; wind E, 2-8 mph. Two observers in 1 party. Total party-hours, 9 (1 by car, 8 on foot); total party-miles, 27 (20 by car, 7 on foot). **Total species, 44; total individuals, 2,254.**—Wendell P. Smith (compiler), Donald Story.

Pamlico County, N.C. (all points within a 15-mile diameter circle centered in Florence at the intersection of roads 1324 and 1329).—1 Jan; 7 AM to 5 PM. Fair and warm; temp. 50 F to 76 F; wind SSW, 0-12 mph, mostly calm. Five observers in 2 parties. Total party-hours, 19 (14 by car, 5 on foot); total party-miles, 98 (92 by car, 6 on foot). **Total species, 62; total individuals, 9,009.**—Geraldine Cox (compiler), Rodney Dees, Sandra Edwards, Nathan Miller, Melvin Whitley.

Raleigh, N.C. (all points within a 15-mile diameter circle centered at State Capitol Building).—29 Dec.; 7:00 AM to 5:30 PM. Clear, ground bare, water open except some ice at edges of streams and ponds; temp. 25 F to 52 F; wind practically calm. Fifty-one observers in 15 parties. Total party-hours, 136.25 (43.5 by car, 92.75 on foot); total party-miles, 406.25 (305 by car, 101.25 on foot). **Total species, 85; total individuals, 9,042.**—Gladys Baker, Mrs. F.H. Brant, Mrs. M.F. Browne, Mike Browne, Mrs. Chas. Bryan, Chas. I. Bryan, Mrs. R.C. Bryant, R.C. Bryant, Mrs. W.J. Buffaloe, J.W. Chalfant, Mrs. W.R. Clary, John Coffey Jr., John Coffey II, Nelson Coffey, Mrs. L.H. Davis, L.H. Davis, Philip Davis, Mrs. L.E. Dillard, Mrs. John W. Duffield, Mrs. David Fuller, Deborah Fuller, Mrs. Harry Grasser, Harry Grasser, Charlotte H. Green, Mrs.

Z.B. Green, J.F. Greene, W.L. Hamnett, Bill Hamnett, Chas. Hartsock, Mrs. Chas. Hartsock, Arnold Hoffmann, Mrs. Robt. Jackson, Miss Mabel Jones, Mrs. John Lamson, John L. Lamson, Harry LeGrand Jr., Edmund LeGrand, Darryl Moffett, Danl T. Moncol, Mr. and Mrs. Perry, John Rhodes, Mrs. John Rhodes, Mrs. Chas. E. Richardson, Eleanor Standaert, Mark Thompson, Mrs. R.A. Turbiville, Chris Underhill, Mrs. D.L. Wray, D.L. Wray (compiler), J. Valentine.

Rocky Mount, N.C. (all points within a 15-mile diameter circle centered at Battleboro to include Rocky Mount, Swift Creek, Fishing Creek, Braswell's, Horne, Bryan, Ward, and Anderson's ponds).—2 Jan.; 6:00 AM to 5:00 PM. Partly cloudy; temp. 50 F to 68 F; wind SW, 15-20 mph. Four observers in 2 parties. Total party-hours, 22 (16 by car, 6 on foot); total party-miles, 123 (111 by car, 12 on foot). **Total species, 64; total individuals, 3,291.**—Joyce Bennett, Marvin Howell, Steven Howell, John Thompson (compiler).

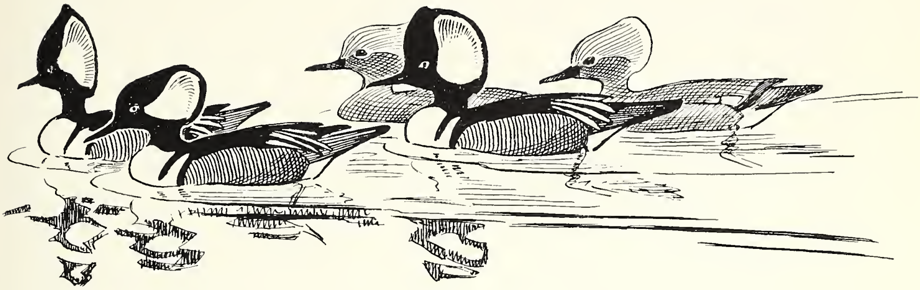
Stanly County, N.C. (all points within a 15-mile diameter circle centered about 2 miles NW of Badin).—28 Dec.; 6:00 AM to 5:00 PM. Sunny and cold; temp. 22 F to 53 F; wind calm to NE at 10 mph. Fifteen observers in 4 parties, 14 individuals working own yards. Total party-hours, 44 (8 by car, 6 by boat, 30 on foot); total party-miles, 204 (154 by car, 23 by boat, 27 on foot). **Total species, 78; total individuals, 6,267.** The **White-crowned Sparrow** has been at the compiler's feeder since 29 November. Larger numbers of water birds are being seen on the river. **Baltimore Orioles** continue to visit feeders in large numbers with West Albemarle birders seeming to have most of these.—Roy Blalock, George Culp, Barrett Crook, Vera Crook (compiler), Joe Ferebee, Rudolph Gerig, Mattie Gerig, C.M. Haithcock, Louise Hammill, Charles Hartsell, Lectie Harwood, Sherman Hill, Gladys Hill, Nell Hinson, Mickey Isenhour, Myrtle Isenhour, Barbara Maner, Gladys Mason, Harold Morris, Heath Morgan, Bessie Morgan, Helen Mount, Ruth Arey Parker, Spencer Plyler, Addie Thompson, John Trott, John Whitlock, Vivian Whitlock, Bennie Winget.

Wayne County, N.C. (all points within a 15-mile diameter circle centered at Indian Springs to include Seven Springs, Mt. Olive, Cliffs of The Neuse State Park and Walnut Creek Lake).—29 Dec.; 6 AM to 5 PM. Clear; temp. 28 F to 54 F; wind 5-10 mph. Seven observers in 2 parties, 1 individual working own yard. Total party-hours, 19 (16 by car, 3 on foot); total party-miles, 160 (157 by car, 3 on foot). **Total species, 72; total individuals, 2,931. Osprey** was seen over the pond at Holmes' Garden and all field marks noted by the three observers.—Joyce Bennett, Margaret Davis, Elizabeth Holmes, Jean Siler, R.H. Siler (compiler), John Thompson, Frank Turner, Margaret Walker.

Wilmington, N.C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction, including Wrightsville Beach, Winter Park, Orton Plantation, Cape Fear River, Carolina Beach, and Greenfield Lake).—30 Dec.; 4:30 AM to 6:00 PM. Hazy in morning, clear in afternoon; temp. 38 F to 71 F; wind S, 3.6-11mph. Eleven observers in 5 parties. Total party-hours, 55.5 (17.5 by car, 3 by boat, 35 on foot); total party-miles, 260 (200 by car, 15 by boat, 45 on foot). **Total species, 145; total individuals, 10,137. Sora** (MB, JP) was at Orton Plantation. **Razorbills** (MB, GM) were about ½ mile off Wrightsville Beach. **Black-throated Gray Warbler** (MB, JP) at Orton Plantation was studied carefully from 35 feet. Parnell is familiar with the species, having observed it on the nesting grounds in the western United States. **Snow Bunting** (JP) was at Carolina Beach.—Maurice Barnhill, Dot Earle (compiler), Betty Everson, Edith Hayworth, Greg Massey, Billy McEachern, Polly Mebane, Al Moore, Frances Needham, James Parnell, Mary Urich.

Winston-Salem, N.C. (all points within a 15-mile diameter circle centered at intersection of Interstate 40 and Silas Creek Parkway as in previous years).—

(Continued on Page 33)



General Field Notes

B. Rhett Chamberlain, *Department Editor*
Wadmalaw Island, S. C. 29487

Advisory Council:
E. Burnham Chamberlain, P.O. Box 3039, Charleston, S.C. 29407
James F. Parnell, Biology, Wilmington College, Wilmington, N.C. 28401
Thomas W. Simpson, 763 Barnesdale Road, Winston-Salem, N.C. 27106
Wendell P. Smith, 911 E Street, North Wilkesboro, N.C. 28659

This department will carry noteworthy data to the extent of the alloted space. Bare lists of occurrences, unless of special interest, will be held for publication in regional groupings. All material should be sent to the Department Editor. It may be presented in final form or subject to re-write. The normal deadline for any issue is six weeks prior to the issue date. Data must be complete enough to enable the Council to render decisions.

Eared Grebe in North Carolina.—An Eared Grebe (*Podiceps caspicus*) was observed and photographed in Banks Channel at Wrightville Beach on the southeastern coast of North Carolina on 13 December 1964. The bird was in the definitive basic plumage of Palmer (*Handbook of North American Birds,* Vol. 1, 1962, Yale University Press). The whitish cheek patch was quite low on the cheeks and upper neck. The bird fed beneath a series of small boat piers along the shore and was observed and photographed at close range. I was unable to collect the bird, however, and it was not seen subsequent to 13 December. The grebe was also seen by Mrs. Sam Earle; and the photographs, color slides taken with a 300 mm lens, were examined by B.R. and E.B. Chamberlain and compared with skins in the Charleston, South Carolina, Museum. They agreed with my identification of this bird as an Eared Grebe.

This western grebe is a rare straggler in eastern North America. Palmer (op. cit.) reports two observations in New Jersey and one in Rhode Island. An asterisk also denotes a record from South Carolina, but no explanation is given. This apparently refers to the bird collected at Charleston, S.C. on 14 December 1959 (*Chat,* 23:62). On 10 March 1962 an Eared Grebe was seen at Norfolk, Virginia (*Raven,* 34:4). The observation at Wrightsville Beach thus appears to be the fifth record of the Eared Grebe along the east coast of the United States and is the first record of this species in North Carolina.—James F. Parnell, *Department of Biology, Wilmington College, Wilmington, North Carolina, 26 January 1966.*

Whistling Swan in Georgetown County, South Carolina.—On Wednesday morning, 29 December 1965, I observed a single Whistling Swan (*Cygnus columbianus*) on the brackish pond in Huntington Beach State Park, Georgetown County, South Carolina. The bird was about a quarter of a mile away. I observed it for a period of about 20 minutes through a 20x scope until it took flight. In my judgment it was definitely a Whistling Swan. I observed the yellow spot at the base of the black bill. Also, the right-angularity of the head and neck when the bird was alerted. In size it was considerably larger than the Canvasbacks in the same pond. When it left, it flew with its neck outstretched. Norman B. Cooler, Park Superintendent, stated that the swan had been on the pond for about two weeks. Both he and his ranger had seen it almost daily during this time. Neither of them had ever seen a swan on the pond before.

As may be recalled, William Post and I saw two Whistling Swans on Barnwell Pond at Christmas 1964 (*Chat,* 29:52). I know that swans winter in North Carolina. I suspect that they may not be common on the South Carolina coast.—T.M. Rial, *791 Boardman Road, Aiken, South Carolina, 3 January 1966.* [A Whistling Swan, presumably the same bird, was observed on this Huntington Park pond on 19 December by Arch McCallum of Dillon, South Carolina. At that time about 200 Canvasbacks were also feeding in the same area.—Dept. Ed.]

White-fronted Geese Taken at Lake Mattamuskeet, North Carolina.—The *Greenville* (North Carolina) *Daily Reflector* of 9 November 1965 carried an account of the killing of two White-fronted Geese by local hunters at Lake Mattamuskett, Hyde County, North Carolina. I visited J.B. Kittrel Jr., one of the party, and obtained these details from Mr. Kittrel.

On 6 November, Kittrel, Ray Minges and Robert Deyton were in a blind in a field near Lake Mattamuskeet. Two geese flew over and both birds were brought down and retrieved. John Farley, another member of the party, made a tentative identification. The birds were taken to Refuge Headquarters and positively identified as White-fronted Geese (*Anser albifrons*). They were found to be a male and a female.

The White-fronted Goose is known as a straggler on the North Carolina coast.—Edmund Welch, *P. O. Box 2043, Greenville, North Carolina, 10 January 1966.* [*Birds of North Carolina,* 1942, records that "a freshly shot specimen was examined by Greene at Mattamuskeet Lake, December 5, 1936 . . ." This is referred to by John Grey in *The Chat* (4:2), which also records a White-front killed at the lake December 9, 1943 and examined by Samuel Lamb, Refuge Manager (8:35). The remaining records of appearances in North Carolina seem to be confined to the Pea Island area on the coast and Gaddy's Pond in the interior (*Chat,* 13:31, 22:45, and 28:32).—Dept. Ed.]

More Pelagic Observations off the Carolinas.—On 12 March 1964, I made a number of observations between the hours of 1000 and 1200 from aboard a naval vessel undergoing sea trials off the coast of South Carolina. During this two hour period, the ship ranged 26 to 30 nautical miles SE of the Charleston Harbor entrance, maneuvering at varying speeds, none exceeding 17 knots. The skies were clear, and the visibility was unrestricted. Sea conditions were calm with winds from the W 6 to 8 knots. Twenty-one Red Phalaropes (*Phalaropus fulicarius*) in winter plumage were seen sitting on the calm surface at 1015. The typical phalarope posture and method of feeding (i.e. spin the body in a tight circle and dab with the bill for zooplankton, etc. that had been brought to the surface in the process) were noted. As the ship approached, the flock flew off a short distance, at which time the stripe in the wing, the uniform light gray back, and the white underparts were observed. This same flock of birds was seen on two other occasions as the ship maneuvered in the same general area. The three observations were made at distances ranging from 75 to 150 yards. At 1030, a Mourning Dove (*Zenaidura macroura*), flying on a SW course, flew across the bow of the ship. A Dovekie (*Plautus alle*) in winter plumage was observed at 1040, swimming alongside amidship at a distance of approximately 20 yards. At 1145, a Razorbill (*Alca torda*) took flight at an estimated distance of 100 yards from the vessel. The bird was dark above and white below. The wings were narrow, pointed, and dark in color. It had a short thick body and a short neck. The bill was dark and stubby. The wing beat was rapid, and the line of flight close to the surface of the water. There appear to be three records of this species for South Carolina. A bird was collected at Pawley's Island, 12 January 1948, by Julius S. McDonald (*South Carolina Bird Life*, 1949). Eugene J. DeVeaux (*Audubon Field Notes*, **12**:270, 1958) found an oiled bird at Sullivan's Island sometime during the winter of 1957-1958. On 15 February 1963, Mary Enloe (*Chat*, **28**:51, 1964) and Mrs. Jesse Newsome picked up an oiled Razorbill at Bull's Island. The specimens from Pawley's Island and Bull's Island were deposited in the collection of the Charleston Museum, however only the head of the latter specimen was preserved. Also seen during this two hour period were the following species: Gannet, Herring Gull, Ring-billed Gull, Laughing Gull, and Bonaparte's Gull.

More observations were made on 1 and 2 April 1964, aboard a naval vessel enroute from Charleston, South Carolina to Norfolk, Virginia. An estimated 3,000 Red Phalaropes were observed between 1545 and 1615 on 1 April, 64 to 70 nautical miles E of Cape Romain, South Carolina. Many large flocks were seen. Most of the birds were usually first detected sitting on the surface of the water. As the ship approached such flocks they would take flight. Sometimes flocks would be seen flying in long lines low over the surface of the ocean. Most of the birds had just begun to molt their winter plumage as was evident by traces of red on the anterior portion of the neck and on the breast. During this brief period of observation, the wind was from the SW, and the sea conditions were moderate. Twice between 0645 and 0715 on 2 April, approximately 35 nautical miles S of Cape Hatteras, North Carolina, a Parasitic Jaeger (*Stercorarius parasiticus*) flew alongside the ship. Two Pomarine Jaegers (*Stercorarius pomarinus*) and a Parasitic Jaeger were observed 33 nautical miles ESE of Cape Hatteras at 1340. Two more Pomarine Jaegers were seen at 1555, 43 nautical miles SE of Oregon Inlet, North Carolina. Two Pomarine Jaegers were noted at 1630, and 10 minutes later a group of 4 appeared when the ship's position was 37 nautical miles SE of Oregon Inlet. Another Parasitic Jaeger was seen at 1805, 30 nautical miles ESE of Oregon Inlet. The jaegers would follow in the wake of the ship, occasionally chasing a Laughing Gull in an attempt to rob it of its food. Some of the jaegers came within 25 to 30 feet of me as I stood on the fantail of the vessel. The Pomarine Jaegers were in various plumages, ranging from the well marked light phase to the dark brown phase. Some birds were heavily barred on the breast. Some had little or no protruding central tail feathers, while others had twisted central tail feathers several inches long. An occasional Gannet was seen on both 1 and 2 April. Herring Gulls, Ring-billed Gulls, and Laughing Gulls were following in the wake of the ship almost continually on both days in April.—PAUL W. SYKES JR., *Department of Zoology, North Carolina State University, Raleigh, North Carolina, 8 November 1965.*

Snowy Owl Shot in Dare County, North Carolina.—A mounted Snowy Owl (*Nyctea scandiaca*) of unknown age and sex was seen by the writer on 21 October 1965, at the residence of Mr. and Mrs. J.G. Midgett of Dare County, North Carolina. The bird had been shot in late January 1964, in the vicinity of the municipal water tower at Nags Head. The plumage of the specimen was heavily barred with brown, indicating an immature or an adult female. No attempt was made to determine the sex on the basis of measurements, since on a mounted specimen they would not be reliable.—PAUL W. SYKES JR., *Department of Zoology, North Carolina State University, Raleigh, North Carolina, 8 November 1965.*

Another Flicker Nest on the Ground.—In the December (1965) issue of *The Chat*, which I have just received, I find in the General Field Notes a reference to the nest of a Yellow-shafted Flicker on the ground in a sub-station (29:111-112). I think you might be interested in a very similar one which was found in Massachusetts in May 1964. I reported it in *Records of New England Birds* published by the Massachusetts Audubon Society, Lincoln, Mass. (Vol. XX, No. 5, 1964). The following is taken from that report.

In late May of 1964 my husband came home from an electric sub-station at Reed Street, just south of Attleboro, Mass., and reported that "a stupid bird has a nest on the ground, just a hollow scooped out in the gravel, and is sitting on six eggs." On the evening of June 1 he drove me to the site and I saw that it was a Yellow-shafted Flicker (*Colaptes auratus*).

New construction had been going on in the station and the bird had been frequently disturbed. Eventually three eggs were found on the ground close to the nest and three were still being incubated. On June 9 my husband went to the station to take a picture of this anomaly, only to find that a very heavy shower the previous evening had flooded the area; the nest was in a puddle and the bird had deserted. One of the eggs that was broken contained a partly developed chick.

This sub-station is in a rural area and there appeared to be many possible locations nearby that were more natural for a flicker's nest.—KATHERINE B. (MRS. KENNETH L.) KINSEY, *344 Cowesett Rd., Warwick, Rhode Island, 31 December 1965.*

A Sight Record of Say's Phoebe in Wake County, North Carolina—On the afternoon of 23 October 1965, while studying a flock of Water Pipits (*Anthus spinoletta*) in a recently plowed field south of Raleigh, my attention was drawn to an unfamiliar bird on a fence post at the far end of the field. From its actions I could tell that it was a flycatcher; however, it had the general appearance of a Robin. It had pale rusty underparts and a very conspicuous black tail. The bird had a superficial resemblance to a Western Kingbird, but it had rusty rather than yellow underparts and, upon closer inspection, showed no white whatsoever in the tail. The only other flycatcher found in this region that it could have possibly been was an Eastern Phoebe; however, its noticeably larger size, black tail and rusty underparts, among other things, gave it a very different appearance.

Realizing the possibility that this bird might be a Say's Phoebe (*Sayornis saya*) or some similar western flycatcher, I made a rough sketch of it, labeled all the field marks, and inserted a brief description of its habitat and behavior. The field marks that I noted are summarized as follows: head, back, and rump—gray with a slight brownish cast; wings — darker with light gray edges to the primaries, secondaries, and coverts; tail — black, contrasting sharply with the color of the rest of the bird; throat and upper breast — light gray, nearly white on the throat; rest of underparts including under tail coverts — pale rusty orange; bill and feet — black; length — 7½ to 8½ inches (a pipit which perched beside it briefly was about 1½ inches shorter and about ¾ the bulk). In addition to the bird's diagnostic flycatcher-like feeding behavior, it had the habit of frequently "wagging" its tail as does the Eastern Phoebe, and it occasionally flew to the ground in search of insects, a behavioral trait not characteristic of most eastern flycatchers.

After comparing my notes with the plates and descriptions on flycatchers in Peterson's *Field Guide to Western Birds* and Pough's *Audubon Bird Guide,* I was convinced that this bird was a Say's Phoebe. I immediately called Jack and Eloise Potter in Zebulon and made arrangements to go out at dawn the next day hoping to collect the bird; however, it was gone when we got there. A cold front had moved into the area by morning and the bird apparently left during the night; consequently, it will have to remain on the hypothetical list until a specimen is obtained.

Though this is the first record of a Say's Phoebe in North Carolina, it has been recorded in at least thirteen states east of the Mississippi River as well as Ontario and Quebec. There are at least four records from Massachusetts (*AOU Checklist,* 1957; *Audubon Field Notes,* **12**:11; *Auk,* 7:228), three from New Jersey (*AFN,* **10**:241, **15**:22), two from New York (Bull, 1964) and Pennsylvania (Poole, 1964), and one each from Alabama (Imhof, 1962), Connecticut (*Auk,* **38**:586), Illinois (Ford, Sanborn, and Coursen, 1934), Indiana (*Auk,* **55**: 280), Michigan (*Wilson Bulletin,* **25**:224), Mississippi (*AFN,* **14**:316), Rhode Island (*AFN,* **17**:312), Virginia (*AFN,* **11**:254), Wisconsin (Kumlein and Hollister, 1951), Ontario (*AFN,* **16**:326), and Quebec (Todd, 1963). Of the above twenty-two records eleven have been made in the last ten years. In accordance with the increasing number of records in recent years, it is not unlikely that the Say's Phoebe is showing an eastward dispersal during migration similar to that of the Western Kingbird and Scissor-tailed Flycatcher.—H.L. JONES, *Department of Zoology, North Carolina State University, Raleigh, N.C., 11 December 1965.* [The description of the bird follows very closely that given in Ridgway's *Birds of North and Middle America,* part IV, p. 602. The "pale rusty orange" of the present writer is referred to as "cinnamon-brown." Ridgway also states that "the outer web of lateral rectrix is more or less distinctly edged with whitish . . ." It seems that this would not be discernible without having the specimen in hand, however.— DEPT. ED.]

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Bank Swallows in Wilkes County, North Carolina.—On 30 August 1965 I saw a mixed flock of over 1,000 swallows on a dead-end farm road along Yadkin River at Ronda, Wilkes Co., North Carolina. The flock rested quietly on the fence wires and made observation easy. I studied the group for the better part of an hour and found that all of our swallows were represented. There were Tree, Bank, Rough-winged, Barn and Cliff Swallows and Purple Martins. I counted five Bank Swallows — the first I have observed here since 1937. The birds made no effort to feed although there was a lake and much pasture land in the vicinity. The previous night and day had been quite cold, possibly accounting for the great numbers. One hundred swallows is considered a good migration group in this area.—Earl M. Hodel, *137 Westover Drive, Elkin, North Carolina, 26 December 1965.*

Worm-eating Warbler in Durham County, North Carolina in Mid-summer.—On 27 June 1965, at our home in Durham County, 3.5 miles east of Chapel Hill, North Carolina, we banded an adult male Worm-eating Warbler (*Helmitheros vermivorus*). The bird was in breeding condition, as evidenced by a prominent cloacal protuberance. We caught the bird in a mist net set in a damp wooded area consisting of second-growth deciduous trees and low underbrush. Three days later, on 30 June, a female Worm-eating Warbler was trapped at the same spot. This bird showed a brood patch. These occurrences are interesting because they suggest breeding activity. Although the species is occasionally found in our location during migration, summer records are rare.—Elizabeth and Robert Teulings, *Route 2, Chapel Hill, North Carolina, 18 December 1965.*

Dickcissels in South Carolina in Mid-winter. — At Walnut Hill farm, near Richland, S.C., my father, D.W. Stribling, noticed a strange bird at the stick feeder near the breakfast room window during the second week of January 1966. It was a sparrow-size bird with yellow on the breast and head.

On Sunday, 16 January at approximately 2:15 pm, the bird appeared at the feeder and remained there for some time and my parents and I were able to observe it closely with glasses. As we were watching, a second, similar bird, lit on the feeder.

From the back the birds appeared to be sparrows, but they had pronounced "finch" beaks. They had outstanding rusty wing patches and the unmistakable "meadowlark" markings with yellow breasts and black bibs. It was not difficult to see that we had male Dickcissels (*Spiza americana*) — unusual visitors in Oconee County, particularly for this time of year.

The birds seem to be at home and have possibly been in the vicinity for several weeks. The feeder hangs from a pecan tree and is about 15 feet from a heavily landscaped windbreak of dogwood, ligustrum, and spirea where the Dickcissels seem to take shelter along with the sparrows, cardinals, and towhees. They were also observed on the ground seeking scratch feed with the sparrows and towhees. The stick feeder was filled with a mixture of tablescraps, peanut butter, suet, and scratch feed. This mixture seemed to appeal to the visitors more than the scratch feed nearby.

Although *The Chat* records numerous appearances of Dickcissels in the Carolinas in recent years, it is known almost exclusively as a summer visitor. It is considered a regular breeder in the Greenville area of South Carolina. Winter records are scarce indeed. — Mrs. Davy-Jo S. Ridge, *17 B-2 Myron Manor, Columbia, South Carolina, 18 January 1966.*

Le Conte's Sparrow Seen in Wake County, North Carolina.—According to *Birds of North Carolina*, Pearson, Brimley, and Brimley, 1942, the only record of the Le Conte's Sparrow for North Carolina is that of a female collected by C.S. Brimley at Raleigh on 21 April 1894. There are several records for South Carolina, but apparently no recent ones. In *South Carolina Bird Life*, Sprunt, and Chamberlain, 1949, describe it as a "rare and erratic winter resident" from Chester and Georgetown counties south to Yemassee.

In view of the apparent scarcity of the bird in the Carolinas, the following record is of interest. On 23 October 1965, while scouting a fescue-broomsedge field (*Festuca*, sp.-*Andropogon virginicus*) west of Raleigh, I flushed a bird that subsequently proved to be a Le Conte's Sparrow (*Passerherbulus caudacutus*). The bird was exceedingly hard to flush, flying only when I approached within 10 to 15 feet of it, and dropping back into the field again about 50 yards away. Fortunately, the bird landed once in a small pine and once in a bush at the edge of the field permitting satisfactory identification. The most striking feature, and the one that made me first realize that this was not one of our typical sparrows, was the bright yellow-buff on its head, breast, and sides. This, along with the conspicuous black streaks on the sides, was enough to make me take a closer look. When I observed the bird head-on and from a slightly higher level, I could see the narrow white crown stripe characteristic of this species. A good field mark not mentioned in the current field guides that serves to distinguish this bird from most other sparrows of similar size and coloration, is the lack of any "whisker" marks. Both the Baird's (*Ammodramus bairdii*) and Henslow's Sparrow (*Passerherbulus henslowii*) have two distinct "whisker" marks. It may be separated from the Grasshopper Sparrow (*Ammodramus savannarum*) by its slimmer build, streaked sides, and brighter underparts. Since I did not notice any red or pink on the nape and did notice a few very faint streaks across its breast upon close inspection, it was probably a first year bird. The bird also had a little more yellow underneath than the adult birds pictured in the field guides.—H.L. JONES, *Department of Zoology, North Carolina State University, Raleigh, N.C., 12 December 1965.* [For more recent occurrences of Le Conte's Sparrow in South Carolina see *Birds of the AEC Savannah River Plant Area, Contributions from the Charleston Museum, XIV,* Robert A. Norris, 1963, p. 69-70.—DEPT. ED.]

Briefs for the Files

Compiled by B.R. CHAMBERLAIN
(All dates 1965 unless noted otherwise)

Common Loon, a group (50 counted) was observed from a motorboat in the Catawba River in SW Mecklenburg County, N.C., 14 November, some surfacing within 30 to 40 feet, William and Flodie Cobey.

Horned Grebe, 4, early at Murrell's Inlet, S.C., 7 November, Mrs. E.D. Smith; 1 on Lake Raleigh, Wake County, 13 November, R.J. Hader.

Brown Pelican, 54 counted at Oregon Inlet (Pea Island), N.C., 11 November, P.W. Sykes Jr.

Cattle Egret, all over Horry and Georgetown counties, numerous to the fall line—inland on 6 September, well scattered through Marion, Florence, Sumter, and Richland counties — over 200 in a pasture 5 mi. E of Columbia, Mrs. E.D. Smith.

Yellow-crowned Night Heron, 2 immature birds at Murrell's Inlet, S.C., 25 October, Mrs. E.D. Smith.

Least Bittern, 1 flushed at a small lake near Kernersville, Forsyth Co., N.C., 31 December, Myron Vourax.

Wood Ibis, 1 feeding in inlet at Garden City, S.C., daily 19 to 25 September, Mrs. John U. Whitlock.

Canada Goose, a lone bird alighted in a street at the east end of Edisto Beach, S.C., and allowed me to walk to within a few yards before taking flight, 14 October, Fred H. May.

Fulvous Tree Duck, 4 were early at Bodie Island, N.C., 28 August, R.J. Hader, J.H. Hunt, and P.W. Sykes Jr.; about 45 were at Medway Plantation, Charleston County, during the weekend 4 December, John Henry Dick.

European Widgeon, a male was seen at Bodie Island, N.C., 30 October by R.J. Hader, H.L. Jones, the J.M. Potters, P.W. Sykes Jr., and P.H. Warren. It was observed in the same place, 3 and 4 November by P.W. Sykes Jr.

Shoveler, 2, early at Huntington State Park, Georgetown Co., S.C., 2 September, Mrs. E.D. Smith.

Redhead, 1 in a small pond in NW corner York County, S.C., 14 and 27 November and again on 5 December, William and Flodie Cobey.

Common Goldeneye, 1 spent some days in enclosure with captive wildfowl at Dixie Plantation, Charleston County, S.C., and was present 16 January 1966, John Henry Dick, et al.

Bald Eagle, 1 mature bird at Lake Wheeler, Wake County, N.C., 28 September, reported by caretaker to R.J. Hader; 1 at Bodie Island, N.C., lighthouse, 5 October, C.L. Gifford and P.W. Sykes Jr., the only eagle found there all fall; 1 immature near Blowing Rock, N.C., 21 September, Wendell P. Smith; a pair attended a nest containing young at Huger, S.C., during January 1966, Edward S. Dingle.

Marsh Hawk, an adult male in light gray plumage low over cultivated field at Mt. Pleasant, S.C., 2 January 1966, B.R. Chamberlain and party.

Virginia Rail, 2 fresh dead mature birds picked up at different locations at Garden City, S.C., 25 October, cause of death unknown, Mrs. E.D. Smith.

Black Rail, 1 observed carefully as it crossed a drainage ditch at Bodie Island, N.C., 1 September, P.W. Sykes Jr.

Florida Gallinule, 500 or more in a freshwater lake at Huntington State Park, Georgetown Co., S.C., 25 October, Mrs. E.D. Smith.

Piping Plover, uncommonly large numbers at Murrell's Inlet, S.C., 6 November, Mrs. E.D. Smith.

American Golden Plover, 1 in good light, Murrell's Inlet, S.C., 3 September, Mrs. E.D. Smith.

Long-billed Curlew, 5 on a meadow at Hilton Head Island, S.C., 21 and 22 July, watched with glasses and compared with Whimbrels present in the area, Mrs. J.G. Newhall.

Pomarine Jaeger, 1 adult flying over Bodie Island, N.C., 2 October, an extremely rare onshore record, P.W. Sykes Jr.

Royal Tern, 10 or 12 over Lake Wylie in SW corner of Mecklenburg County, N.C., 25 September, William and Flodie Cobey.

Dovekie, an injured bird was picked up on a highway at Nags Head, N.C., 16 November, specimen preserved, P.W. Sykes Jr.

Ground Dove, plentiful at Litchfield Beach, Georgetown County, S.C., 11 flushed on a ½ mile walk, 4 September, Mrs. E.D. Smith.

Black-billed Cuckoo, 1, late at Edisto Beach, S.C., 14 November, Fred H. May.

Common Nighthawk, 1 late at Charlotte, N.C., 17 October, J.R. and Rebekah Norwood.

Western Kingbird, 1 noted as early as 10 September at Pea Island, N.C., P.W. Sykes Jr.; 1 at Yacht Club, Edisto Beach, S.C., 18 October, Fred H. May; 2 collected, near East Lake, Dare County, 29 October, H.L. Jones.

Red-breasted Nuthatch, 1 at Southern Pines, N.C., 1 October, common by end of the month, Jay Carter.

Eastern Bluebird, over 30 in a migrating flock at Greenville, N.C., 6 October, Edmund Welch; a few at outskirts of Charlotte, N.C., but none seen from there to Pawley's Island, S.C., and return during end of November, the E.O. Clarksons.

Magnolia Warbler, 1 or more seen regularly at Southern Pines, N.C., between 25 September and 3 October, Jay Carter.

Cape May Warbler, 1 killed at TV tower, Raleigh, N.C., 25 September, in breeding plumage, R.J. Hader.

Yellowthroat, a female near Raleigh, N.C., about 1 month late, 21 November, H.L. Jones.

Yellow-breasted Chat, 1 at Magnolia Gardens, Charleston County, S.C., 13 January 1966, T.A. Beckett III.

American Redstart, 1 at Charlotte, N.C., 16 July, J.R. and Rebekah Norwood.

Baltimore Oriole, 1 male in Charlotte, N.C., yard, 30 September, the J.R. Norwoods; 1, 10 and 17 October in West Albemarle, N.C., Mrs. J.U. Whitlock; 1 male, Walterboro, S.C., 6 December, Mr. and Mrs. Harvey Lybrand; 1 at Greenville, N.C., 8 January 1966, Edmund Welch.

Painted Bunting, several at window feeder at Edisto Beach, S.C., during the fall, last seen: male, 9 December, female, 18 December, Mr. and Mrs. Harvey Lybrand.

Evening Grosbeak, 1 at Bodie Island, N.C., 25 October and twice during the following week, P.W. Sykes, Jr.; about 30 at Charlotte, N.C., 7 November, David Wright; 3 at Statesville, N.C., 14 November, Eunice Hickman; 1 female, Charlotte, N.C., 30 November, Rebekah Norwood.

Red Crossbill, 3 on 23, 24 and 26 December and 22 on 2 January 1966 at Charlotte, N.C., Mrs. Clinton McKay, *fide* Mrs. E.O. Clarkson.

White-crowned Sparrow, 1 immature at Raleigh, N.C., 19 October, R.J. Hader; 1 immature at Pawley's Island, S.C., 24 November, Mrs. E.O. Clarkson.

Fox Sparrow, 17 counted in the first appearance this winter at Raleigh, N.C., 21 November, H.L. Jones.

CHRISTMAS BIRD COUNT—1965

(Continued from Page 24)

2 Jan.; 6:00 AM to 5:30 PM. Cloudy; temp. 49 F to 64 F; wind SW, 5-25 mph. Eighteen observers in 8 parties. Total party-hours, 73 (24 by car, 2 by boat, 47 on foot); total party-miles, 366 (314 by car, 8 by boat, 44 on foot). **Total species, 67; total individuals, 28,560. Water Pipits** have never before been recorded on Christmas Count. Starlings and blackbirds were present in substantially larger numbers. Apparently a roost has been moved back to this area. **Grasshopper Sparrows** (MV, ES) were seen in the same area as was the single bird listed on the 1963 Christmas Count.—Linda Arnold, John P. Davis, Velma Davis, Gary Gidley, Gertrude Haney, John Haney, Fred Hill, Page Hill, Royce Hough III (compiler), Martha Killam, Lee Nading, Barbara Page, Thomas Simpson, Harry Snavely, Ramona Snavely, Edith Spinks, Myron Vourax, Robert Witherington (Audubon Society of Forsyth County, guests).

NEWS AND COMMENTS

(Continued from Page 3)

Individuals may also obtain cards directly from us: North American Nest Record Card Program, Laboratory of Ornithology, 33 Sapsucker Woods Road, Ithaca, New York 14850. Be sure to include your zip code with your return address.

CBC Regional Center is James F. Parnell, Department of Biology, Wilmington College, Wilmington, N.C. He reports having received about 200 completed cards from a dozen observers; but he notes that other cards from the Carolinas were probably sent directly to the Laboratory of Ornithology.

Correction

The photograph of the Cliff Swallow nest (*Chat*, 29:97, December 1965) was inadvertently published upside down. The Editor, never having seen a Cliff Swallow nest, misinterpreted the angle from which the picture was taken. She apologizes to the photographer, Jay Shuler, and to the author of the paper, Adair M. Tedards. In spite of this unfortunate error, the paper has received many favorable comments; and at least one person has joined CBC as a direct result of having read it.

(Continued on Page 36)

ARTICLES OF AMENDMENT TO THE CHARTER OF CAROLINA BIRD CLUB, INC.

The undersigned non-profit corporation, for the purpose of amending its articles of incorporation, and in accordance with the provisions of section 55A-36 of the North Carolina Non-Profit Corporation Act, hereby sets forth:

I

Name of the corporation: CAROLINA BIRD CLUB, INC.

II

At a regularly convened meeting of the members of the corporation held on the 4th day of December, A.D. 1965, the following amendments to the articles of incorporation were adopted in the form of a rewriting of the Charter as follows:

ARTICLES OF INCORPORATION
OF
CAROLINA BIRD CLUB, INC.
A NON-PROFIT CORPORATION

We, the undersigned natural persons of the age of twenty-one years or more, acting as incorporators for the purpose of creating a non-profit corporation under the laws of the State of North Carolina, as contained in Chapter 55A of the General Statutes of North Carolina, entitled "Non-Profit Corporation Act," and the several amendments thereto, do hereby set forth:

1. The name of the corporation is CAROLINA BIRD CLUB, INC.
2. The period of duration of the corporation shall be PERPETUAL.
3. The purposes for which the corporation is organized are:
   (a) The study of birds and the education of the people of North and South Carolina as to the value of birds.
   (b) The promotion and establishment of local bird clubs and wildlife refuges and sanctuaries in the several sections of the two States.
   (c) The publication and dissemination of a periodic magazine.
   (d) Cooperation with State and Federal Authorities in bringing about better enforcement of all existing laws for the protection of wildlife.
   (e) To lend assistance and financial help including but not limited to donations, gifts, grants, scholarships, and memberships to individuals, corporations and associations for further educational or scientific studies related to ornithology, conservation and the protection of wildlife.
   (f) To do and perform such matters and things as are allowed by law and may be reasonably convenient or necessary to attain the objects and ends for which it was organized as hereinafter set forth.
4. The corporation is to have the following classes of members: Regular, Student, Sustaining, Contributing, Life, Honorary. Participation in its affairs shall be by membership therein, subject to the following rules and regulations:
   (a) By-laws governing the admission of members, the amount of initiation fees and periodic dues, the rules and regulations to be observed, the qualifications for voting, the resignation or expulsion of members, the election, powers and duties of officers and of a general governing body, and all other matters and things usually and legally contained

in corporate by-laws may from time to time be adopted, amended or repealed by the affirmative vote of a majority of all members who are entitled to vote and are present either personally or by legal proxy at any meeting of the members.

(b) At all meetings of the membership, each member entitled to vote under the by-laws then existing may cast one vote either in person or by proxy; but no person may cast a vote as proxy of another who is not then a member of the corporation and entitled to vote at such meeting in his or her own name.

(c) Any funds belonging to the corporation may by the general governing body of the corporation be used for any of the objects for which the corporation is formed; but no dividends shall ever be declared or paid to the members.

(d) No member who has died, resigned or been expelled shall thereafter have any interest in or claim upon the property or assets of the corporation.

5. Directors of the corporation shall be elected in the following manner: By a majority of the votes cast at the regular annual Spring meeting of the membership.

6. The address of the initial registered office of the corporation is as follows:
   Street address (if none, so state): ROUTE 1
   City or Town: COLUMBUS, North Carolina
   County: POLK

   The name of the initial registered agent of the corporation at the above address is NORME D FROST

7. The number of directors constituting the present board of directors shall be 12 and the names and addresses (including street and number, if any) of the persons who are to serve as directors until their successors are elected and qualified are:
   1. Norme D Frost, Wilderness Rd., Box 271, Tryon, N.C.
   2. Garvin Hughes, 1250 Fifth St., Hickory, N.C.
   3. Richard Siler, Route 2, Seven Springs, N.C.
   4. Mrs. W. Cornwell Stone, 146 West End, Chester, S.C.
   5. Mrs. Jack Potter Jr., Box 487, Zebulon, N.C.
   6. Mrs. Clyde Sisson, 1617 Tanglewood Rd., Columbia, S.C.
   7. Harry Davis, State Museum, Box 2281, Raleigh, N.C.
   8. William Hamnett, State Museum, Box 2281, Raleigh, N.C.
   9. Theodore A. Beckett III, Magnolia Gardens, Johns Island, S.C.
   10. John L. Lamson, 2010 Buckingham Rd., Raleigh, N.C.
   11. Linville L. Hendren, Box 148, Elkin, N.C.

   Note: One Director has resigned and the office has not been filled yet.

8. (a) The corporation shall have and issue no capital stock and shall be operated without profit. No part of the assets or income of the corporation shall be distributed to or inure to the benefit of any member, director, or officer of the corporation or any private individual. However, reasonable compensation may be paid for services rendered to or for the corporation affecting one or more of its purposes.

   (b) In the event of dissolution no member, director, or officer of the corporation or any private individual shall be entitled to share in the distribution of the assets of the corporation but such assets shall be donated, transferred, delivered and conveyed by the directors to one or more organizations engaged in similar activities that have qualified under Section 501 (c) (3) or corresponding provisions of the Internal Revenue Code and have qualified under Chapter 105, Section 125 and 138 of the General Statutes of North Carolina.

III

The corporation has members with voting rights. A quorum was present at the meeting held on the above date; and the said amendment received at least two-thirds of the votes entitled to be cast by members present or represented by proxy at such meetings.

IN TESTIMONY WHEREOF, the corporation has caused this document to be executed in its name by its President and Secretary this 5th day of December, A.D., 1965.

CAROLINA BIRD CLUB, INC.
By: (Norme D Frost), President
(Kay C. Sisson), Secretary

STATE OF NORTH CAROLINA
COUNTY OF POLK

This is to certify that on this the 5th day of December, A.D. 1965, personally appeared before me NORME D FROST and KAY SISSON each of whom, being by me first duly sworn, deposes and says that he signed the foregoing "Articles of Amendment" in the capacity indicated, and that the statements therein contained are true and correct.

John A. Stephenson, Notary Public (Seal)

My Commission expires: 6-27-67

Filed in the office of Clerk of the Superior Court of Polk County, North Carolina, December 17th, 1965, duly recorded and indexed in Record of Corporation Book No. 3, page 16.

This 17 December, 1965

Robert S. McFarland
Clerk of the Superior Court,
Polk County, North Carolina.

NEWS AND COMMENTS

(Continued from Page 33)

Spring Count

It is suggested that Spring Bird Counts be taken during the last week of April or the first week of May. Count forms will be sent to last year's compilers about 1 April. Anyone else needing a count form should write the Editor at Box 487, Zebulon, N.C. 27597. Reports must reach the Editor on or before 1 June 1966 in order to be included in the table.

South Carolina Birds of the Foothills

Jay Shuler reports that his *South Carolina Birds of the Foothills* should be off the press about 1 March--too late for a review in this issue. It will have over 80 pages with 16 species illustrated in color from photographs by the author. The price will be $3.95. Inquiries about the book may be directed to Mr. Shuler at 43 Kirkwood Lane, Greenville, S.C.

Snake Brochure Available

Poisonous Snakes of the Eastern United States with First Aid Guide is an informative 20-page brochure recently published by the North Carolina State Museum at Raleigh. The author is Harry T. Davis, director emeritus of the museum. The pamphlet has four colored plates and eleven black-and-white illustrations to facilitate identification of the eight poisonous species discussed and to demonstrate first aid methods. Copies are 25¢ each, with discounts available on large orders, from the Museum Extension Fund, N.C. State Museum, Box 2281, Raleigh, N.C. 27602.

BACKYARD BIRDING

(Continued from Page 11)

and the screams of the jays became more and more frantic. I walked toward the fence which divides my yard from my neighbor's. When I was about three feet from the fence, out of a pine growing right beside it, and apparently taking off from the lowest branch, flew a Sharp-shinned Hawk, passing just a few feet over my head. It flew up and over my house and disappeared. I had undoubtedly interrupted its dinner vigil; that is, the jays and I had.

Soon the jays stopped screaming and activity resumed in my yard.

ETTA SCHIFFMAN, Greensboro, N. C.

Unusual Tenants at Peckerwood Apartments

"Peckerwood Apartments" is a big dead pine tree in the yard of Mrs. Edward M. Henderson of Columbia, South Carolina. Mrs. Henderson says this tree attracts all kinds of woodpeckers, but on the morning of October 5, she could hardly believe her eyes when she glanced out and discovered a Pileated Woodpecker busily working his way up the trunk. He tried several holes for size, then flew away. But he came back, wrote Mrs. Henderson, on October 6, 8, and 9. Then on October 15, two appeared! They stayed awhile, worked on several holes, then left. On October 27, one returned for a short while. She had about given up, when to her surprise one returned on Sunday, December 5. Now she is hoping that, as spring approaches, the pair will return and build in her Peckerwood Apartments!

Woodpecker Warfare

Woodpeckers are so much more conspicuous in winter than when the leaves are on the trees. For the past several years, a Yellow-bellied Sapsucker has come to spend this season on our hillside. This fall the male brought his mate and an immature with him, and believe me, three Sapsuckers is a yard-full! For they are always waging war with the Red-bellied and Downies for possession of the suet post. The male Red-bellied finally flew to the post one bright morning and just clung there, not feeding at all, but clearly staying to keep the Sapsuckers away.

Well, the family came and hung around on limbs of the pecan tree overhead. Suddenly, the male made a swoop at the Red-bellied and away they went, rolling over and over on the ground! Both made a dash for the swamp around the spring, so swiftly that I could not see which was in pursuit of which. While they were both gone, the Downies came for their breakfast, but they were kept away by the female Baltimore Oriole. So they moved on to the north side of the house, where there is suet in a holder on the trunk of another pecan tree.

The next time I looked out the kitchen windows, there was a Sapsucker on the suet post, all swelled up to twice the normal size! There is never a dull moment in my back yard, not with this woodpecker warfare going on!—ARF

CONSERVATION

(Continued from Page 9)

ing habitat with over 107 miles of shoreline along Little Quill, Middle Quill, and Big Quill lakes. Recently the South Carolina Wildlife Resources Department sent a check for $5,349 to Ducks Unlimited, Inc., for the Palmetto State Project in Canada. A total of $30,000 derived from a portion of the non-resident hunting licenses has been spent thus far on the project.

Carolina Bird Club
INC.

Founded 6 March 1937 **Incorporated 8 August 1949**

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. The several classes of membership are listed below. Checks should be made payable to Carolina Bird Club, Inc., and sent to the Treasurer.

Regular Membership	$ 2.00
Family Membership	$ 3.00
Sustaining Membership	$ 5.00
Contributing Membership	$ 25.00
Life Membership (Payable in four consecutive annual installments.)	$100.00
Student Membership or Library Subscription	$ 1.00
Affiliated Club	$ 2.00

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat.* Subscription price to non-members is $1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to CBC Headquarters, P.O. Box 1220, Tryon, N.C. 28782. Please notify Treasurer immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes, Backyard Birding, or Conservation departments should be sent to the respective department editors.

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	Garvin Hughes, 1250 Fifth Street N.E., Hickory, N.C.
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The Chat

Bulletin of the Carolina Bird Club, Inc.
ol. 30 June 1966 No. 2

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Birds

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The Chat

Volume 30 **June 1966** **Number 2**

Published by The Carolina Bird Club, Inc.

Editor ____ Eloise F. Potter, Box 487, Zebulon, N.C.
General Field Notes ____ B.R. Chamberlain, Rt. 1, Wadmalaw Island, S.C.
Backyard Birding ____ Annie Rivers Faver, Rt. 2, Eastover, S.C.
Conservation ____ Gladys Buckner, 500 West Ave., North Augusta, S.C.
Editorial Board ____ Thomas L. Quay, B.R. Chamberlain, Charles H. Blake
Contributing Editors ____ John K. Terres, Jack Dermid, John Henry Dick, and Alexander Sprunt Jr.
Associate Editors ____ Thomas W. Simpson, Kay C. Sisson, James F. Parnell, Doris C. Hauser, Ernest Cutts, and Adair M. Tedards

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OUR COVER—Pileated Woodpecker photographed by Norme D Frost in his yard at Tryon, N. C.

Evidence of the Eastward Expansion of the Breeding Range of the Song Sparrow into the Eastern Piedmont of North Carolina

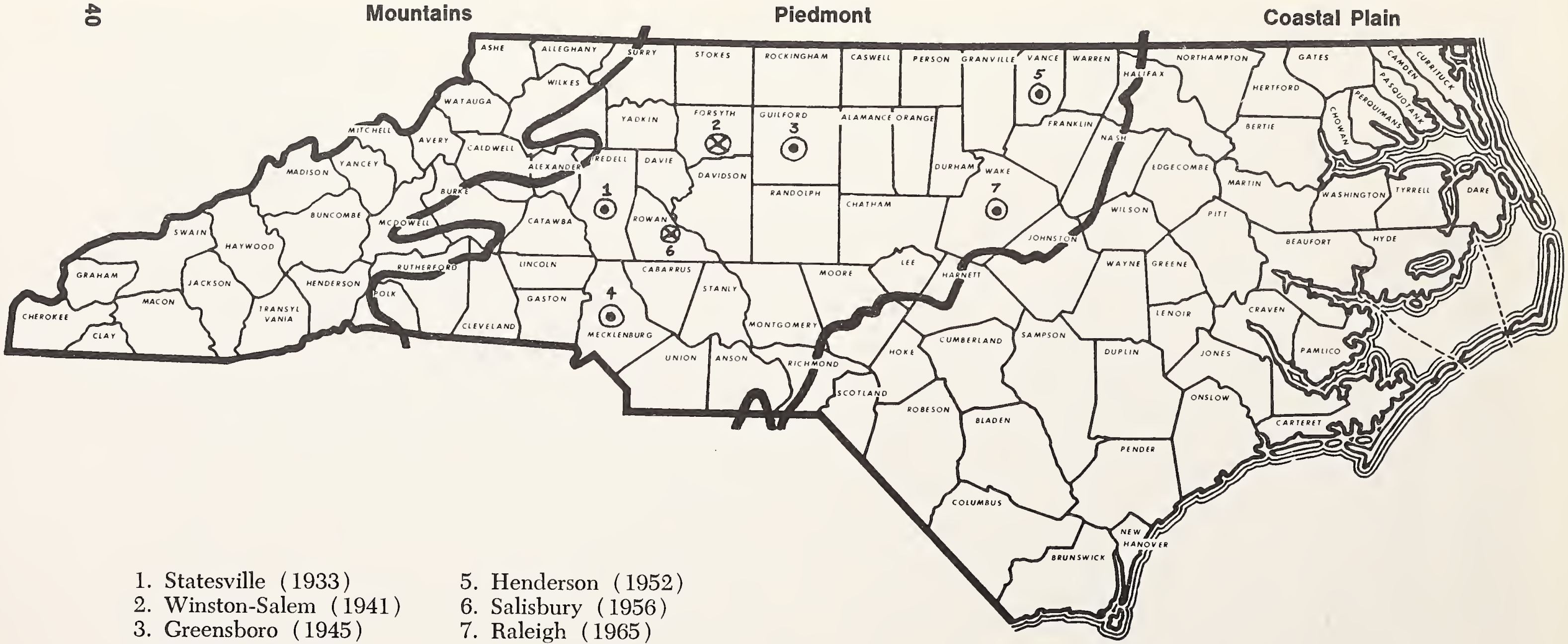
Paul W. Sykes Jr.

Pearson, Brimley, and Brimley (1942) noted that the Song Sparrow (*Melospiza melodia*) breeds in two widely isolated geographical regions in North Carolina. Within the state, they list two subspecies, *M.m. melodia* and *M.m. euphonia,* as breeding in the mountains, and a third form, *M.m. atlantica,* as breeding along the coastal barrier islands from Beaufort north, with no evidence of any of these forms breeding in the intervening portion of the state. The separation of the breeding range of the two inland forms is not clear. It is noted with interest that the fifth edition of the *A.O.U. Check-list* (1957) lists only *M.m. euphonia* as breeding in western North Carolina. *M.m. melodia* is listed as breeding only as far south as central Virginia (Lynchburg, Petersburg). Murray (1952) lists *M.m. euphonia* as the inland form breeding in southern Virginia, and Sprunt and Chamberlain (1949) list it as the only breeding form in South Carolina. Thus, the question is raised, does *M.m. melodia* actually breed in the mountains of North Carolina? To resolve this question, some collecting is needed in the western part of the state during the breeding season.

Recent findings indicate that the breeding range of the Song Sparrow may be slowly extending eastward into the eastern Piedmont of North Carolina. Grace Anderson (1937) stated that the first Song Sparrow nest found at Statesville, Iredell County (see Fig. 1), was in 1933, and that the breeding population has continued to increase since that time. During the 1941 nesting season, W.L. Anderson Jr. (1941) reported the birds present at Winston-Salem, but no nesting evidence was found. For the following two seasons the species was reported on the increase in the Winston-Salem area by Chance (1942) and Anderson (1943), but there was still no positive evidence of breeding. Josephine Stewart (1944) reported Song Sparrows in Greensboro, Guilford County, during the summer of 1944. On 24 April 1945, T.L. Zapf (1945) found the first nest for Guilford County (see Fig. 1) in the Lake Daniel region. This nest contained three young. During that same nesting season, Archie D. Shaftesbury (1945) reported two other nests, which were located in the same general area. B.R. Chamberlain (1951) disclosed the first nesting evidence for Charlotte (see Fig. 1), when Norman Chamberlain, on 18 July 1951, observed an adult feeding a fledgling in a city garden. On 21 July 1952, Mrs. A.W. Bachman (1952) found the first nesting evidence for Vance County (see Fig. 1), when she observed young out of the nest at Henderson. In both 1956 and 1958, J.R. Norwood (1956, 1958) reported birds present at Salisbury, Rowan County, through the nesting season, but found no positive evidence of breeding. During early August 1964, Stephen D. Fretwell (pers. comm.) observed a lone bird within the city limit of Raleigh, near Lake Raleigh. The bird was seen only once.

On 23 April 1965, Harold S. Atkinson Jr. and Richard B. Hamilton (1965) found a Song Sparrow nest on the ground (see Fig. 2) at the North Carolina State University Dairy Farm, approximately 0.6 miles west of Raleigh (see Fig. 1). This is the first breeding record for Wake County. Most of the nests reported in North Carolina have been in shrubs or other dense vegetation. However, this may only reflect the fact that few people have looked for ground nests of this species. Nice (1937, 1943) in her studies of the Song Sparrow (mainly in Columbus, Ohio) found that the first nest of the season (April) is usually on the ground. Her explanation for this is that such a site affords two basic requirements, namely support and concealment for the nest. Most other sites at this date have not yet developed adequate cover for concealment. This may explain

SMITHSONIAN INSTITUTION JUL 25 1966


Mountains
Piedmont
Coastal Plain
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
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GRANVILLE
VANCE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
WILKES
WATAUGA
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
FRANKLIN
NASH
BERTIE
MITCHELL
AVERY
CALDWELL
ALEXANDER
IREDELL
DAVIE
DAVIDSON
DURHAM
WAKE
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
BURKE
RANDOLPH
CHATHAM
WILSON
PITT
BUNCOMBE
MCDOWELL
CATAWBA
ROWAN
JOHNSTON
BEAUFORT
HYDE
SWAIN
HAYWOOD
LINCOLN
CABARRUS
MOORE
LEE
HARNETT
WAYNE
GREENE
GRAHAM
JACKSON
HENDERSON
RUTHERFORD
STANLY
CHEROKEE
MACON
TRANSYLVANIA
POLK
GASTON
CLEVELAND
MONTGOMERY
LENOIR
CRAVEN
CLAY
MECKLENBURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
PAMLICO
SCOTLAND
ROBESON
BLADEN
ONSLOW
CARTERET
PENDER
COLUMBUS
NEW HANOVER
BRUNSWICK
1
2
3
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5
6
7

1. Statesville (1933)
2. Winston-Salem (1941)
3. Greensboro (1945)
4. Charlotte (1951)
5. Henderson (1952)
6. Salisbury (1956)
7. Raleigh (1965)

Fig. 1. The locations of positive breeding evidence of the Song Sparrow in the Piedmont of North Carolina are shown by a solid dot within a circle. Other locations at which adult birds were observed during the nesting season, but no positive evidence of breeding found, are shown by an X within a circle. The year of the first discovery at each location is given in parenthesis. The approximate boundaries between the three regions of the state are from Lee (1955).

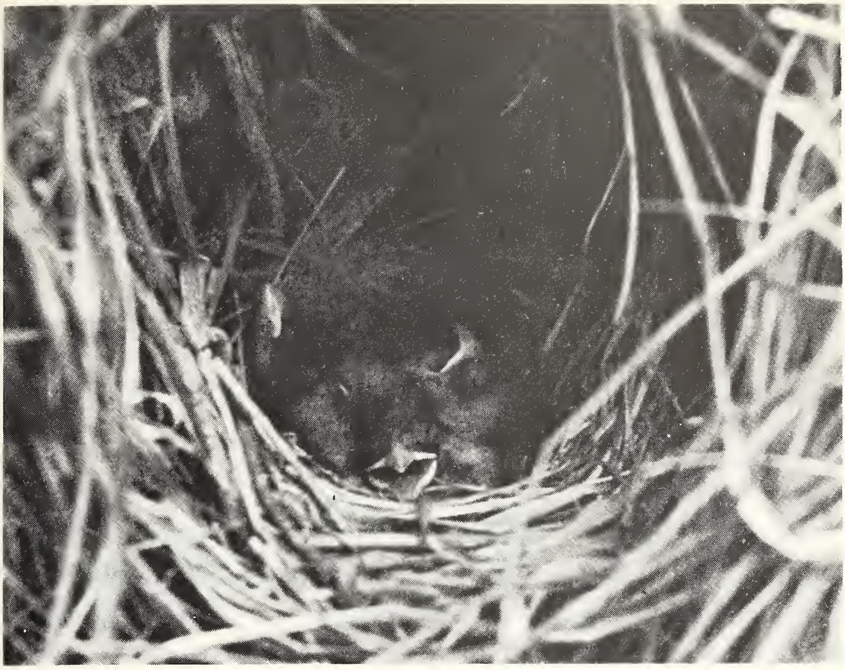

Fig. 2. Ground nest of Song Sparrow with young in a tussock of blue grass, Wake County (near Raleigh), N.C., 13 May 1965.

the choice of site for this nest in Wake County, since the foliage of most species had not emerged sufficiently by mid-April to afford ample cover, except at the ground level.

The nest in Wake County contained three eggs on 23 April. Atkinson showed the nest to the writer on 27 April, at which time it contained five eggs under incubation. The incubating bird flushed from the nest upon our approach. The nest, composed of dried grasses, had an inside diameter of 60 mm and a maximum depth of 44 mm. It was well hidden in a tussock of blue grass (*Poa* sp.) growing at the base of an old wire fence on the edge of a bank near the eastern edge of a farm pond. The fence ran north-south, with a small stand of deciduous trees to the west between it and the eastern shore of the pond, and a pasture to the east. The stand of trees was composed mainly of willow (*Salix* sp.), yellow-poplar (*Liriodendron tulipifera*), sweet-gum (*Liquidambar styraciflua*), sycamore (*Platanus occidentalis*), and flowering dogwood (*Cornus florida*). The pasture consisted of a mixture of blue grass, orchard grass (*Dactylis glomerata*), fescue (*Festuca* sp.), clover (*Trifolium* sp.), etc. The nest still contained eggs on the afternoon of 7 May. The nest was checked at 3:15 PM on 10 May, at which time it contained five young. The young were almost naked, and the eyes were still closed. The eggs hatched on either 8 or 9 May, judging by the state of development of the young. By 13 May, the young birds had developed numerous pin feathers, and their eyes had fully opened. The young were last observed on 14 May. The nest was not checked on either 15 or 16 May. Atkinson and the writer found the nest empty, but intact on the afternoon of 17 May. No young were seen in the vicinity on this date. Only one adult bird was seen on any of the nest checks, and none was seen on the last visit to the site.

The fate of the five young Song Sparrows was not determined, but it is possible that they left the nest on their own. Nice (1943) found that in Ohio the average age for leaving the nest was 9.85 days. If the Wake County birds did leave the nest on 15, 16, or the morning of 17 May, they would have been from 8 to 10 days old, which conforms well with the findings of Nice.

The subspecies of the Wake County birds was not established, but the most likely form would be *M.m. euphonia.* In Virginia, Murray (1952) states that *M.m. euphonia* breeds throughout the state, except in the northcentral region, where it is replaced by *M.m. melodia,* and in the coastal areas where *M.m. atlantica* is the breeding form. Sprunt and Chamberlain (1949) list *M.m. euphonia* as the only breeding form in South Carolina; it being confined to the mountain region.

Stephen D. Fretwell (pers. comm.) observed two Song Sparrows singing in a growth of kudzu (*Pueraria lobata*) within the city limit of Raleigh, near Lake Raleigh on 15 May 1965. No evidence of breeding was noted. The location of this observation was approximately 2.5 miles SE of the nest site on the dairy farm.

It will be interesting to see if this apparent eastward or southeastward expansion of the breeding range into the Piedmont of North Carolina continues, and if so, what factors are responsible.

ACKNOWLEDGMENTS

I wish to thank Mr. B.R. Chamberlain and Dr. T.L. Quay for their comments and suggestions in the preparation of this paper.

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Department of Zoology, N.C. State University
Raleigh, North Carolina
6 February 1966

CONSERVATION

BATTLE AGAINST EXTINCTION

Gladys Buckner

Secretary of the Interior Stewart Udall warns that "despite unprecedented conservation action in 1965, we are still losing the overall battle to save America's endangered species of fish and wildlife from extinction." We continue to "encroach on priceless habitat with dredges, bulldozers, pesticides, fire, explosives, and concrete." He reminds us that "each species is a part of the food chain which supports other species. Each has a function to perform."

In a letter to Congress the Interior Department reported that some 24 birds and 12 mammals native to the United States and Puerto Rico have become extinct since the settlement of the 50 states. The Department said that these extinct species will soon be joined by others unless special conservation work is undertaken.

In an effort to rebuild populations of rare and endangered wildlife species, biologists have been directed to study specific problems, re-examine accepted pest control practices, and propagate some of the endangered creatures on a 300-acre "modern day Noah's Ark" at Patuxent Wildlife Research Center near Laurel, Maryland.

One phase of the program will emphasize methods of determining ways of rearing endangered creatures in captivity so that they will retain their wild characteristics and thus have a better chance for survival following their release. "If such a program had existed a century ago, it might have saved the Passenger Pigeon, Carolina Parakeet, and Heath Hen," Secretary Udall said. "It still may help prevent the extinction of dozens of species that now are threatened."

One subject of research at Patuxent is the Florida Everglades Kite, which has become so rare that it is considered unwise to use these birds for preliminary studies. Only ten were counted recently in southern Florida. To facilitate study thirteen young Snail Kites have been imported from Argentina. The South American kite and the Florida kite are of the same species but are members of different subspecies.

The feet and legs of the Snail Kite are not as strong as those of other hawks that feed on active prey, but its upper bill is curved to the extent that it can remove the flesh from snails which constitute its principal food. The decline of the Everglades Kite may be the result of the decline of the *Ampullaria* snail, which was once abundant in fresh-water marshes of Florida. The marshes have been drained for commercial purposes and the Everglades Kite has been deprived of much of its natural habitat as well as its food.

The biologists at Patuxent hope to convert the Snail Kites to a diet of beef and vitamin supplement. It is not planned to release them in the wild since they were brought in for scientific purposes.

Eagle Protection

Bald and Golden Eagles are on the steady decline. The purpose of the midwinter survey by scientists was to determine the distribution of these birds, possible factors responsible for their population reduction, and means of preserving their nests and nesting habitats.

In late January Secretary Udall ordered new protective steps for the Bald Eagle. Approximately one square mile provided for each nesting area will be closed off on National Wildlife Refuges during the nesting season. Timber cutting will be prohibited within one-half mile of trees containing Bald Eagle nests, and potential nesting sites must be preserved. If nesting trees are in danger of being blown down, they are to be stabilized if possible.

Causes of the decline of the Bald Eagle as listed by an Interior Department release are believed to be illegal shooting, the increase of human population in nesting areas, disturbance of nesting birds, loss of nest trees, and possible reduced reproduction as a result of pesticides taken in food. The Bureau of Sport Fisheries and Wildlife is doing research to determine the effects of pesticides on eagle reproduction.

Bald and Golden Eagles are protected by Federal law. The maximum Federal penalty for killing or possessing either is a fine of $500.00 or six months imprisonment, or both.

The Florida Audubon Society has obtained agreements with landowners where nests are located to have nesting areas treated as sanctuaries.

Pelican Problems

T.A. Beckett III, of Charleston, S.C., warns of the decline of the pelican population. His letter follows:

"I have watched the rapid decline of the Brown Pelican in South Carolina for several years and have been corresponding with ornithologists in the remaining states where the species has bred. With the exception of the state of Florida the bird is no longer a breeding species south of us in Texas, Louisiana, Mississippi, and Alabama.

"It seems odd to me that in Florida alone there is no apparent decrease in successful breeding of this species. From my few observations there, I would disagree that the downward trend is not already in progress. However, only actual work in the colonies can give a true picture. . . .

"Since so little is apparently being done to find out the cause of the decline of the Brown Pelican, I am making direct appeal by letter to Interior Secretary Udall. In my opinion the Brown Pelican is in more danger of immediate extinction than the Whooping Crane. At least the Whooping Crane shows a relatively stable number, though few, whereas I feel certain that the Brown Pelican is declining by at least 30% in breeding birds each year. This is a shocking statement, but nevertheless I feel it is true, since 1958, in the entire breeding areas along the Atlantic and Gulf coasts. . . . The time for alarm is now while corrective measures may still be possible, or is it already too late?"

Pelicans are not at present afforded Federal protection, nor is the Osprey, another endangered fish-eating species, protected by Federal law.

Smith Island Resolution

Chairman J.W. York has announced that on the basis of information now available, the North Carolina Board of Conservation and Development adopted a resolution at its meeting of 17 May 1966 supporting (1) the preservation and protection, in their natural state, of all areas of Smith Island which are or may be found by actual survey and title search to belong to the State of North Carolina and (2) not only supports the right and freedom of the owner to pursue his vested interests with his legal holdings on Smith Island in the way and manner of his choosing, not inconsistent with the rights of others, but encourages and supports his efforts and plans to fully develop his holdings and (3) should the owner express an interest in disposing of part of or all of his legal holdings on Smith Island, the State hopes that Mr. Sherrill might consider making it available as a possible State Park.

Backyard Birding

Annie Rivers Faver
Department Editor

Notice from Department Editor

After a "trial run" last August, I am returning to Camp Everglades in south Florida for most of the summer. As resource person in Nature Study, I am learning far more than I am teaching, but it is a most wonderful experience. So for material for the September *Chat*, please mail your *Backyard Birding* directly to me at Camp Everglades, Star Route, Box 70B, Clewiston, Florida 33440. Please send items as soon as possible after receiving the June *Chat*. May the interesting reports in this issue encourage many other birders to share their experiences with our readers. Thank you.—A.R. Faver

Ambitious Birds!

Three years ago I wrote of Garinger High School's nesting Horned Larks and the story came to an abrupt and sad end. Now, at last, I can report a successful nesting. The larks nested in the same barren heavily traveled area about 50 feet from a gravel walk leading from the gymnasium to the athletic fields, tennis courts, track and baseball field; about 75 feet from a student parking lot; and right in the middle of a short cut used by hundreds of phys. ed. students going from the gym to the athletic fields. A 15-inch stake placed near the nest was its only protection. The parent birds were very tame and allowed us to come within about 15 feet before moving away. They were almost always on the ground within an area about 200 feet from the nest and seemed undisturbed by the comings and goings of the students and faculty members.

The birds were hatched the weekend of March 19-20 and survived, in addition to the curious students, one heavy shower, winds up to 14 and 15 knots, and temperatures as low as 28 degrees.

By Sunday morning, March 27, the three birds were crowding the nest, feathers had appeared on heads and bodies, and quills on wings. By late afternoon of the same day they were almost completely feathered and were spilling over the edge of the nest.

On Wednesday, March 30, two birds left the nest. The third stayed on an extra day. He was 2¾ inches long and almost filled the nest that only nine days earlier appeared to contain a large grayish caterpillar. He was perfectly composed and with quiet good humor allowed himself to be petted.

I did not see any of the young birds after they left the nest but I was told that, when approached too closely, the parent birds walked away and the young birds "froze." At least one was returned to the nest by an overly solicitous student but apparently no harm was done. Just one of the many hazards of growing up in the backyard of 2,200 high school students.—Mrs. Shuford K. Peeler, *Charlotte, N.C.*

Bird Counting by Telephone at Flat Rock

Today, January 23, 1966, is the tenth day snow has been on the ground, so our activities have all been confined to indoors. We are not lonely. We are not even bored. Who could be bored when dozens and dozens of visitors appear at the front door each day? My bird visitors sometimes run well over 30, all feeding at one time. I count 22 species and my list is constantly being increased as friends report new ones. This is small compared to the 40 to 51 species reported in the Christmas Bird Counts in the Smokies. However, my count is without even going out my front door. If Ted Beckett were here with his net, I wonder how many he could catch and band?

In talking over the phone with my neighbor, Miss Margaret Sandburg, I hear that she has a whole flock of Purple Finches, while one lone male comes to our feeder. I report a Brown Thrasher. She is surprised, for we think of them as summer residents. I see that they are listed by Stupka, in *Birds of the Great Smoky Mountains National Park*, as "uncommon winter residents."

Next I call a friend in Arden, 12 miles away. He reports a Red-bellied Woodpecker: a red top-knot with zebra-like markings, he says, just one lone bird. I see in the Christmas Count that it is listed—a single bird, on 5 of the 26 years. So the Red-bellied Woodpecker seems to always be a loner here.

My sister calls and tells of seeing a Red-headed Woodpecker. This is the only eastern woodpecker with the entire head red. I talk with a lady 83 years old. She had trouble with squirrels getting on her feeder, so a friend built one for her that tilts with the weight of a squirrel, thus dumping it off.

I call the radio station and ask them to remind people to feed the birds. They request that I give a list of foods birds like. In such a list I always include the meat of cocoanuts. As I watch the little feathered visitors feed, I see that they make the rounds, taking some of each kind of food. This, of course, gives them a better balanced diet.

(When the weather is too cold to get outside, birding by telephone is the next best thing.)—Leeming Grimshawe, *Flat Rock, N.C.*

From My Backyard Notes—Etta Schiffman

Members of the Piedmont Bird Club frequently ask me what unusual birds have I observed in my yard. The reason for this is that I do have such birds here quite often. During the winter of 1962-1963, five Baltimore Orioles practically spent the winter with me. From January 6 until April 21, 1964, a Black-headed Grosbeak visited my feeders several times daily, although he was supposed to be wintering in Texas or somewhere west of the Mississippi. (See *Chat,* June 1964, General Field Notes.)

This winter, the unusual thing about my backyard is that nothing very unusual in the way of birds has been here, unless the unusual numbers of some species be taken into consideration. Specifically I refer to Pine Siskins and Cedar Waxwings.

The siskins first appeared in my yard in large flocks of perhaps a hundred or more in the latter part of November 1965 and came many times daily until right after our first big snow about the middle of January 1966. They would feed in the pines and sweet gums, then descend on my double decker birdbath for a bath and drink. I could look out of the window at almost any time and the bath would be full. Sometimes not only the basin but the heater wire leading to the basin. Also the air above the basin would be filled with birds, while others would be perched on the surrounding trees and shrubs awaiting their turn. One interesting fact about the siskins is that they seemed absolutely unafraid of people. I could walk right up to the birdbath and they would continue with their drinking and bathing as if they did not even know I was there. Several times other members of our bird club came to observe them and stood within a few feet of the birdbath to watch. Needless to say, I was able to photograph the birds at close range without resorting to the use of a blind. After the first snow in January I did not see large groups again, but occasionally have seen one or two. I might add that this was a siskin year in Greensboro. Large flocks were observed by many people all over this area.

I have been accustomed to having flocks of Cedar Waxwings come to strip the berries off my ligustrum and pyracantha shrubs and then disappear until next year's berries were there. This year it was different. A flock of waxwings came first early in December, but seemed interested only in the birdbath, ignoring the berries which covered a large pyracantha nearby. From then on to the present, waxwings have been in my yard several times a week. I do not know whether they were always of the same flock. Their number varied from nine or ten to as many as thirty. They must have been working the whole neighborhood. Finally, they stripped the pyracantha on December 24. They are still stopping in my yead almost daily. Only yesterday (February 25, 1966) there were nine here in the late afternoon. I saw them when I returned from a trip to our downtown area where I had been observing what must have been well over a thousand Cedar Waxwings! Yes, I said over a *thousand.* And that is a story worth telling.

Late yesterday afternoon I received a telephone call from Bob Turner, our Club treasurer, asking me to go down to the parking lot of the Burlington Mills office. He said there was a huge gathering of waxwings feeding on the berries of the shrubbery around the parking lot. I grabbed my camera and drove the three miles to the place. Never have I seen anything like it! The electric wires along the street were filled with Cedar Waxwings. There were two utility poles about 65 feet apart with three wires stretched between them. These wires were filled solidly. There were wires running from the poles to others farther down the street and diagonally to poles across the street. These were filled solidly with waxwings. By counting the birds along one wire and multiplying that figure by the number of filled wires, I arrived at the amazing estimate of something over a thousand birds.

The traffic along the streets on two sides of the parking lot was heavy and quite noisy and the huge lot itself was filled with the cars of the many people working in the buildings. Occasionally, large groups of birds would fly down to the huge Burfordi hollies or to the ligustrum to feed but would be soon frightened off by the traffic beside or in the lot. I was told that the birds had been there all the preceding day, also. I am sure that in a quieter location that many birds could have finished stripping the berries in a few hours. When I left the bushes were still filled with berries, so I determined to go back the next day, only earlier in the afternoon, so I would have better light for photography.

Well, I went back the next day, which was, of course, this afternoon (February 26, 1966). There were even more birds than yesterday! They had finished stripping the berries off the bushes and were now eating the hundreds that had fallen to the ground under the bushes. They were not interrupted so often, as this was Saturday. The Burlington Mills office does not work on Saturday and there were no cars in the lot, consequently no people walking back and forth through it. I am quite sure that all the berries will be gone by nightfall and that the birds will leave.

Naturally, the news of the huge flock of waxwings spread among the bird lovers of Greensboro and many people went down to that almost unbelievable spectacle. We shall probably never see anything like it again. This has indeed been a Cedar Waxwing year as well as a Pine Siskin year in this area.

It has also been an Evening Grosbeak year here, for practically every one with a feeding station has had these beautiful visitors as guests for the past weeks—except me. I haven't had a one!—Etta Schiffman, *Greensboro, N.C.*

Thousands at the Seashore, Too!

Mrs. B.H. (Pie) Guy of Edisto Beach wrote on February 1, 1966:

"We truly *had* the birds! Think that bad storm you had just before our snow must have run the birds down this way. We have had robins and waxwings by the thousands, plus the hundreds of crows that moved in for the winter. We have had flocks of as many as 50 bluebirds, which is unusual for us. Have had loads of juncos. Yesterday had fun identifying what Pie said looked like a sparrow that had fallen into pink paint . . . a Purple Finch! The first we'd ever seen. They are all about to eat us out of house and home.

Poor dears, with everything so frozen, we've felt we had to keep the feeders full, and it takes about 5 pounds of feed per day. The redwings and starlings are here by the thousands, too, and every now and then they move in and run everything else away.

Many of the people who have spent many winters here say that they have never seen anything like the number of birds that have been here for the past five or six weeks.

In Memoriam

IVAN REXFORD TOMKINS

Among the observers covering the last Christmas Count on Hilton Head Island, South Carolina, was Ivan R. Tomkins, of Savannah, Georgia. Less than two months later, on 12 February 1966, Ivan died, in his 73rd year.

Ivan Tomkins was recognized as one of the southeast's leading naturalists. His principal love was ornithology, perhaps his second was photography. Many, always competent and thought-provoking, were his contributions to local and national publications.

Ivan Tomkins was well-versed in a number of fields—in identification, distribution, taxonomy, and behavior. His was a keen, an analytical mind. To him "what" and "where" were of interest, but "how" and "why" were more important. Modest and generous himself, rightly he laughed at pretense and pomp.

We could ill afford to lose so valued a colleague, so good a friend.

E. Burnham Chamberlain

Death has also recently claimed Mrs. Edith M. Sherrod and Miss Mariel Gary. Mrs. Sherrod was a faithful member of Catesby Bird Club. An editorial in the *High Point Enterprise* commented on her "enthusiasm for community well-being to the end of her useful and ever-interesting life." Miss Gary served Henderson Bird Club as compiler of its bird counts, and she participated in the recent Spring Count even though failing health forced her to relinquish the compiler's duties.

B. Rhett Chamberlain

It was with deep sorrow that we learned of the death of B. Rhett Chamberlain on 28 May 1966 following an illness of about one month. We extend heartfelt sympathy to Mrs. Chamberlain and other members of the family.

Mr. Chamberlain edited the General Field Notes department of *Chat* for 15 years with uncommon ability and devotion. With typical enthusiasm and efficiency he completed assembling material for the present issue only a few days before entering the hospital. No one could ask for a more dependable co-worker, a more trustworthy adviser, a more generous friend.—EFP

General Field Notes

B. Rhett Chamberlain, *Department Editor*
Wadmalaw Island, S. C. 29487

Advisory Council:

E. Burnham Chamberlain, P.O. Box 3039, Charleston, S.C. 29407
James F. Parnell, Biology, Wilmington College, Wilmington, N.C. 28401
Thomas W. Simpson, 763 Barnesdale Road, Winston-Salem, N.C. 27106
Wendell P. Smith, 911 E Street, North Wilkesboro, N.C. 28659

IMPORTANT NOTICE TO CONTRIBUTORS

James F. Parnell has kindly offered to edit the General Field Notes for the September 1966 *Chat*. His address is the Department of Biology, Wilmington College, Wilmington, N.C. Robert P. Teulings, of Route 2, Chapel Hill, N.C., has volunteered to write the winter finch summary. Information already submitted for the September issue will be forwarded to Dr. Parnell and Mr. Teulings. Please send additional items directly to them.—Ed.

Roseate Spoonbill in Late Summer at Bodie Island, North Carolina.—There have been several reports of the Roseate Spoonbill (*Ajaia ajaja*) in North Carolina. The first was by Edward Fleischer (*Chat,* 1(2):2, 1937) in the spring of 1919, on Smith Island, Brunswick County; the second was by Lawrence G. Sprunt (*Chat,* 26:97, 1962) on the intercoastal waterway south of Wrightsville Beach, New Hanover County, on 16 August 1962; and the third was by Mr. and Mrs. S.H. Thornton (*Chat,* 29:106, 1965) on Bodie Island, Dare County, on 7 June 1965. This Bodie Island bird was also seen by Mr. and Mrs. Albert E. Werking and party on 8 June (Dept. Ed. Note, ibid.).

On 23 August 1965, Mrs. Floy C. Burford of Norfolk, observed a bird feeding at close range on the pond by the lighthouse on Bodie Island; this constituting the fifth sight record for the state. Mrs. Burford noted that the bird was very tame. I observed this same bird at the aforementioned location on Bodie Island on the afternoon of 26 August. The bird flew within 40 to 50 feet of me, circled, and flew by again at about the same range. A short time later that afternoon, Robert K. Smith, Seasonal Naturalist with the National Park Service at Bodie Island, and I observed the bird in the same area with a mixed flock of herons. The area was checked for the next several days, but the bird was not seen again. —Paul W. Sykes Jr., *Department of Zoology, North Carolina State University, Raleigh, North Carolina, 6 February 1966.* [Mr. Sykes has called to our attention an error in the editorial footnote to the Thornton observation cited above. The date *23 August* should have read *26 August.*—Dept. Ed.]

Greater Scaup Added to Savannah River Plant Area List.—Joseph R. Fatora, author of the note appearing under this caption in our December 1966 issue, p. 107-108, has requested that we correct a misstatement in that note. The specimen taken in January 1964 is shown in the "personal collection" of Ernest E. Provost. Actually, the specimen is in the University of Georgia School of Forestry wildlife study collection. The author apologizes to Dr. Provost for this regrettable error.

Early Summer Records of the American Rough-legged Hawk in South Carolina.—On 2 June 1964, an American Rough-legged Hawk (*Buteo lagopus*) was flushed from the roadside while the writer was running a morning call-count quail census line on the AEC Savannah River Project near Aiken, South Carolina. The observation was made on an infrequently used paved road in Barnwell County adjacent to the Savannah River. The large raptor flew from the roadside as the vehicle approached. It was clearly observed at a distance of 5 yards, providing an opportunity for positive identification.

At first glance the startled bird was easily recognized as a *Buteo* by the broad wings and comparatively short tail characteristic of this genus, and could not have been confused with the smaller, slimmer Marsh Hawk which is common in the area. It flew sluggishly with labored wing strokes to a dead weathered tree some 40 yards distant, alighting on a limb 20 feet above the ground, perching erectly for several minutes before flying into the pine woods. Seen from above, the white base of the tail was conspicuous, extending two-thirds the length of the tail. The dark terminal band comprised the outer third. This particular individual was adjudged to be in the light phase of the species.

This bird was not observed again in the area by the author. In a conversation with John B. Hatcher, Forest Manager of the Savannah River Project, in June 1965, it was learned that a Rough-legged Hawk had been struck and killed by a pulp-wood truck and brought in to Forest Service headquarters during the summer of 1964, but no data were recorded before it was disposed of. This specimen was not seen by the author, but it is reasonable to assume that the identification by Mr. Hatcher, a competent naturalist and professional forester, was correct. This was probably the same individual observed on 2 June since the occurrence of an individual of this species in this area during the summer months is extremely rare. No specimen has as yet been secured from South Carolina (A. Sprunt Jr. and E.B. Chamberlain, 1949, *South Carolina Bird Life,* Charleston Museum Contribution No. 11, p. 170).

This apparently constitutes a late record for this northern raptor this far south. A. Sprunt (1940, *Auk,* 47(4):564-565) suggests that the species nested on Lake Okeechobee, Florida, in 1937. In 1938 Sprunt observed a Rough-legged Hawk on 19 May near the same area. Numerous winter records exist in the literature for this species in Florida, Georgia, and South Carolina, giving support to the status of this hawk as a rare winter resident. Sprunt and Chamberlain, op. cit., record 7 April as the extreme spring record for the Rough-leg in South Carolina.

The present two observations constitute an addition to the species list of the birds of the Savannah River Project (R.A. Norris, 1963, *Birds of the AEC Savannah River Plant Area,* Charleston Museum Contribution No. 14).

I wish to thank Mr. John B. Hatcher for permission to use his observation and Dr. James H. Jenkins of the School of Forestry, The University of Georgia for suggestions regarding the preparation of this report. These observations were made while conducting quail research on a cooperative project between the University of Georgia School of Forestry, Georgia Forest Research Council, and the College Experiment Station under McIntire-Stennis Project 12 on the lands of the Atomic Energy Commission's Savannah River Plant.—JOSEPH R. FATORA, *School of Forestry, The University of Georgia, Athens, Georgia, 24 January 1966.*

American Avocet on the Carolina Coasts.—For many years any occurrence of the American Avocet (*Recurvirostra americana*) on the Atlantic Coast has been considered accidental or casual. Thus Bent (1927, *U.S. Natl. Mus. Bull. 142*) lists as casual some half a dozen spring and fall records made between 1880 and 1925. No Atlantic coast winter records are shown although there appears (p. 46) "... Jamaica, reported in winter." [Under winter range (p. 45) one reads "North to Carolina (Novata and Stockton);" obviously a clerical error for "California".]

The Fifth Edition of the A.O.U. *Check-list* (1957) says (p. 209) of the American Avocet: "In migration ... rarely or casually eastward to the Atlantic Coast." Cuba and Jamaica are included in "Accidental". Brodkorb, in *Vertebrates of the United States* (1957, p. 464) says "Winters from California and Texas to Guatemala; rare on Atlantic Coast."

During the past 25 or so years we have had a marked increase in the records of occurrence of this species in the Carolinas. In *Birds of North Carolina* (1942) the Avocet is first recorded (sight record of six birds) on 12 September 1869. Sixty-five years later the first specimen was recorded as taken on 15 December 1934. Between 29 August and 27 December 1940 one to four birds were reported on six occasions, and on 9 June 1941 a single bird was noted.

A review of the files of the *Chat* through March 1966 shows no less than twenty records of the occurrence of the American Avocet in North Carolina. From 8 September 1939 through 28 December 1965, observations of 1 to 81 birds were noted between 5 August (1962) and 23 May (1958). In addition, Paul W. Sykes Jr. (personal communication and *Audubon Field Notes,* **20**:1, p. 29) cites 13 observations made in the Bodie-Pea Island area of Dare County, from 27 August to 30 November 1965. His notes show a low of 22 birds and a high of 126, with an average of about 75 birds per observation. Sykes comments: "This species was observed in large numbers throughout the fall in the Bodie-Pea Island area and was still present on 30 November, when I terminated my field work ...." Thirty-four were still on hand on the Christmas Count, 28 December 1965. (Date cited above.)

South Carolina Bird Life (1949) gives evidence of the changing status of this species on the southeastern Atlantic coast. For nearly a century following John Bachman's comment on the Avocet's rarity in South Carolina, no observations were reported in that state. Between 14 November 1923 and 6 June 1949 at least 18 observations (of 1 to 50 birds) were reported, including the taking of four specimens. The records cover the periods 5 October (1930) to 14 March (1940), and in spring and early summer from 20 May (1940) through 6 June (1949).

A check of the files of the *Chat* and *Audubon Field Notes* reveals at least seven records (of 1 to about 100 birds each) from March 1953 to March 1966. These are distributed from 7 October (1960) to mid-May (1953). In addition, T.A. Yawkey, South Island, Georgetown County, S.C. reports (personal letter, 14 February 1966) about 50 birds present daily from 1 October to 1 November 1965; 150 to 200 daily from 1 November 1965 to 1 February 1966; and 4 to 10 daily until 14 February 1966 (date of letter).

Habitat, Behavior, etc. In connection with the comparatively large numbers of birds known to winter, at least in recent years, in the Carolinas, the condition of one of these birds is of interest. Writing of an adult female taken in Dare

County, N.C. 15 December 1934, Mayr (*Auk*, **52**:185, 1935) says it "proved very fat." Indicative of nocturnal as well as diurnal activity is Appleberry's note (*Chat*, 14:31, 1950) on a bird "observed feeding day and night" in a mud-hole at Wilmington, N.C., 16 to 26 October 1949. In the letter cited above, T.A. Yawkey writes: "As I was not satisfied with the natural water vegetation growth last fall I decided to drain (in some instances) and lower the water level (in others) of most of my banked in areas. I started this upon my arrival at South Island Oct. 1 (1965). This procedure was gradual during October but almost entirely affected by Nov. 15. I saw approximately 50 Avocets upon arrival and as water level lowered more and more collected until there were 150 - 200 birds. These could be seen any given day as long as ponds were drained. January rains and salt water (intake thru trunks) raised levels and birds dispersed. I should imagine that this flock must be in the general area of the Santee Delta at least the winter months."

In brief summary as to the status of this species on the coasts of the two Carolinas it would appear that ample evidence has accumulated to warrant changing the status from accidental or casual to that of rare winter visitor. As regards South Carolina, that stand was taken in 1949, in *South Carolina Bird Life*. —E. Burnham Chamberlain, *P.O. Box 3039, Charleston, South Carolina,* and B. Rhett Chamberlain, *Rt. 1, Wadmalaw Island, South Carolina, 13 April 1966.*

Sight Record of the Glaucous Gull at Charleston, South Carolina.—On 22 February 1966, Edward A. Hyer saw four large white gulls near the Ben Sawyer bridge back of Sullivan's Island, Charleston County, South Carolina. He promptly reported the observation to E. Milby Burton, Director of the Charleston Museum, and expressed his belief that they were Glaucous Gulls (*Larus hyperboreus*). The identification may well have been accurate. However, lacking the opportunity for prolonged study of the birds at rest, separation of that species from the Iceland Gull would be hazardous. Both species have been known to range as far south as the Florida coast on rare occasions. A Glaucous Gull, the sole specimen for South Carolina, was taken in Charleston Harbor on 24 November 1947 by E.B. Chamberlain (*South Carolina Bird Life*, 1949).—B. Rhett Chamberlain, *Wadmalaw Island, South Carolina, 10 April 1966.*

White-winged Dove in South Carolina.—On 6 December 1965, while on a Mourning Dove hunt on James Island, near Charleston, Charleston County, South Carolina, W.O. Bootle took a White-winged Dove (*Zenaida asiatica*). Through the alertness and interest of J.L. Branham and E.L. Blitch III, the bird was secured and presented to The Charleston Museum, after I had the opportunity of examining it in the flesh. The specimen, a male in fine plumage, is now in the Museum's collections. It has been examined by Dr. George B. Saunders, and pronounced representative of the eastern race, *Z.a. asiatica*.

[Another "white-winged" dove taken a few days after the above, proved to be an albinistic Mourning Dove (*Zenaidura macroura*), on examination by E. Milby Burton, Director of The Charleston Museum.]

This appears to be the first record, and specimen, of the White-winged Dove from South Carolina, although the species is known as a winter straggler in several southeastern states. In North Carolina it is on record only from Pea Island, Dare County (June 1943 and November 1958, *Chat*, 23:37,88, 1959). Thanks are due Messrs. Branham and Blitch, and Dr. Saunders for valued aid.—E. Burnham Chamberlain, *Box 3039, Charleston, South Carolina, 10 April 1966.*

Western Tanager Sighted at Dillon, South Carolina.—On 19 January 1966, my husband and I found a bird we have identified as a female Western Tanager (*Piranga ludoviciana*). It was sighted shortly after noon while it was feeding on ground beef suet about 25 yards distant and nearly at eye level. The bird fed slowly and deliberately but occasionally changed positions on the rim of the container so that front, back, and side views were obtained. What appeared to be the identical bird was seen by us on the following four days. In each case it was observed in good light through 7 x 50 binoculars.

Due to its coloration the bird was first thought to be a female oriole. The light colored and rather blunt bill, the notched tail, and the bird's somewhat sluggish actions placed it among the tanagers. There was no eye-stripe or ring. Wing bars were present and we determined it to be a Western Tanager.

The *Chat* records appearances of the Western Tanager at Hartsville and Columbia, in South Carolina, and at Waynesville, Lake Mattamuskeet, Fayetteville, and Elkin, in North Carolina (11:14, 1947; 21:46,90, 1957; 22:11,85, 1958; 23:61, 1959; 25:4, 1961; and 27:25, 1963).—CARL L. AND FLORENCE S. BAUER, *108 Elizabeth Lane, Dillon, South Carolina, 26 January 1966.*

Another House Finch Taken in North Carolina.—We have been on the alert for House Finches since Eloise Potter's article appeared in *The Chat* in September 1964 (28:63-68, 1964). On 23 February 1966 at our home banding station in Durham County, 3.5 miles east of Chapel Hill, North Carolina, my wife netted a male House Finch (*Carpodacus mexicanus*). Its plumage was distinctly different from the male Purple Finches we are accustomed to handling and she recognized almost instantly what she had trapped. The bird was checked against Mrs. Potter's published description; it matched with the exception that our bird had a golden rump.

My wife called me at work to tell me about her catch. Her intention was to band the bird and release it after having the identification corroborated by another person. I called T.L. Quay at North Carolina State University to ask whether he would like to examine the bird before it was released. He suggested a specimen would be much more valuable than a banding record, so I agreed to let him take the bird for the collection at the University at Raleigh. Dr. Quay has confirmed our identification but I do not know the details of his analysis in regard to subspecies and age.

To our knowledge this was the only House Finch to visit our station this winter, although we have been banding Purple Finches almost daily since mid-November. Our banding total for Purple Finches exceeds 2,500 for the winter. —ROBERT P. TEULINGS, *Route 2, Chapel Hill, North Carolina, 12 April 1966.* [In connection with the "golden rump" mentioned above, it is very interesting to note that Ridgway (Bull. U.S. Natl. Mus. No. 50, *The Birds of North and Middle America,* Part 1, p. 131) states in a footnote that there is "much variation in the hue of the red (of the rump), the color being scarlet or crimson in summer, more purplish . . . in winter. Occasionally the color varies to orange or even yellow." This reference is made to the nominate form. Possibly it is applicable also to the other races. The House Finch colony on Long Island, New York, apparently the source of wanderers found elsewhere in the East, is said to be representative of *C.m. frontalis* (*Auk,* 70:31-37, 1953). DEPT. ED.]

Oregon Junco Seen Near Winston-Salem, North Carolina.—With the heavy snowfall that extended far into the Southeast at the end of January 1966, two Oregon Juncos (*Junco oreganus*) came to a feeder near Clemmons, Forsyth County, North Carolina. Originally reported by Mrs. Harry Snavely, the birds were later seen by Thomas Simpson, Robert Witherington, the writer, and others. All concurred in the original identification. Color pictures were taken. Both birds had definite gray hoods, brownish backs, and bright pinkish sides. One was more definitely marked than the other but both stood notably distinct from the many Slate-colored Juncos that were present in various plumages. The birds appeared to be of the "pink-sided" form which I have been familiar with in West Texas.

Because of the objections of the owners of the property the birds were not collected. They were seen regularly from 29 January until 8 February.

Chat records the appearance of the Oregon Junco in North Carolina, at Greensboro (1948); Zebulon (specimen, 1960); Jackson County (1964); and Statesville (1965).—C. Royce Hough III, *Wachovia Bank & Trust Company, Winston-Salem, North Carolina, 22 February 1966.*

Oregon Junco Recurrence at Zebulon, North Carolina.—A male Oregon Junco (*Junco oreganus*) was seen at Zebulon, North Carolina 23 February 1966 by the writer and her two sons. The bird was viewed in excellent light at close range (about 20 feet) both with and without a binocular. A second observation of the same species (presumably the same individual) was made 27 February. At this time the bird was feeding with a flock of about 25 Slate-colored Juncos (*J. hyemalis*). A suspected female Oregon Junco was also noted, but unfortunately the flock took flight before a positive identification could be made. The gray hood appeared clearly defined, but the sides were never seen satisfactorily.

The juncos seen on 27 February were feeding on the ground exactly where I saw a subadult White-crowned Sparrow (*Zonotrichia leucophrys*) feeding with several Slate-colored Juncos 4 and 5 February 1966. The area is only about 75 feet from the place that an Oregon Junco was collected in March 1960 (*Chat*, **24**:27, 1960). This particular bird was identified at the U.S. National Museum as an intergrade between *J.o. montanus* and *J.o. shufeldti* (*Chat*, **28**:6, 1964). The N.C. State Museum now has on display a mounted pair of Oregon Juncos acquired in exchange for the study skin, which was added to the collections of the U.S. National Museum.

In view of the recurrence of the Oregon Junco at Zebulon and the apparently increased frequency of occurrence throughout Piedmont North Carolina, it seems proper to add one other record for eastern Wake County. Some time during the last week of February 1960, Mrs. T.Y. Baker Sr. reported to me by telephone that she had seen two male Oregon Juncos near her home about 5 miles north of Zebulon. Appearance of the same species in my own yard approximately one week later makes the validity of her record almost beyond doubt. It is probable that the Oregon Junco is far more often present in North Carolina than the literature indicates. Its tendency to associate with the very common Slate-colored Junco and the male's superficial resemblance to the male Rufous-sided Towhee may cause the Oregon Junco to be overlooked among the large flocks of winter finches.—Eloise F. Potter, *Box 487, Zebulon, North Carolina, 19 April 1966.*

Tree Sparrow Banded in North Carolina.—On 23 November 1965 we trapped and banded a Tree Sparrow (*Spizella arborea*) at our feeding station at Chapel Hill, North Carolina. We released the bird immediately after identification and we have not seen it since. The sex was not determined.—Elizabeth and Robert Teulings, *Route 2, Chapel Hill, North Carolina, 18 December 1965.* [Although *Chat* records a few scattered observations of the Tree Sparrow in North Carolina, it appears that only three specimens have been collected. Burleigh found several in a group at Asheville during the winter of 1932-1933 and took one of them (*Birds of North Carolina*, Pearson, Brimley and Brimley). H.L. Jones (pers. com.) collected two in Wake County on 12 February 1966, details of which will be published later. No specimen is known from South Carolina.—Dept. Ed.]

Briefs for the Files

Compiled by B.R. Chamberlain
(All dates 1966 unless noted otherwise)

Horned Grebe, 6 at Salem Lake, Winston-Salem, N.C., 23 December 1965, apparently the first record for the area, C. Royce Hough III.

Cattle Egret, 5 near Columbia, S.C., 12 April, Mrs. Ellison D. Smith; 3 individuals at widely separated locations in Charleston County, 12 April, Harry Freeman and B.R. Chamberlain.

Fulvous Tree Duck, 4 at Magnolia Gardens (Charleston), S.C., present most of the winter, Theodore A. Beckett III.

Wood Duck, 18 on Salem Lake, Winston-Salem, N.C., 4 February, unusual here in winter, C. Royce Hough III.

Redhead, apprx. 50, Lake Johnson, Raleigh, N.C., 5 February, Ronnie Underwood.

Common Goldeneye, 1 female, near Raleigh, N.C., 16 December 1965, R.J. Hader; 4 (3 males) at Salem Lake, Winston-Salem, N.C., 4 February, C. Royce Hough III; 1 male, Lake Wheeler, Wake Co., N.C., 5 March, H.L. Jones.

Broad-winged Hawk, 1 in Marion County, S.C., 11 April, Mrs. Ellison D. Smith.

King Rail, 1 Lake Raleigh, Wake Co., N.C., 18 February, N.C. State Ornithology Class.

American Woodcock, 1 flushed from stream bed in yard at Winston-Salem, N.C., 3 January, first winter record for the area, Dr. and Mrs. J.P. Davis, fide C. Royce Hough III.

Greater Yellowlegs, 1 present at Lake Raleigh, N.C., through December 1965 and at least until 21 January, R.J. Hader; 1 present at Lake Wheeler, Raleigh, N.C., 30 December 1965, H.L. Jones and 1 there also 13 March, Mike Browne.

Pectoral Sandpiper, 1 at Lake Raleigh, N.C., 17 October 1965, Lee Jones.

Hudsonian Godwit, 1 at Bodie Island, Dare Co., N.C., 23 October 1965, Paul W. Sykes and James Parnell.

Great Black-backed Gull, 1 mature, at Murrell's Inlet, S.C., 6 and 7 November 1965, Mrs. Ellison D. Smith.

Ground Dove, 1 killed by a hunter near Columbia, S.C., 3 December 1965, Annie Rivers Faver.

Eastern Kingbird, 1 or more at Hilton Head Island, S.C., remained until 5 January, Caroline Newhall.

Eastern Wood Peewee, 1 seen regularly at Hilton Head Island, S.C., through the winter to 5 January, Caroline Newhall.

Cliff Swallow, 1 at Columbia, S.C., 8 April, Mrs. Ellison D. Smith; 1 in bright plumage remained perched 45 minutes on service wire crossing pond in yard on Wadmalaw Island, S.C., 15 April, B.R. Chamberlain.

Purple Martin, 1 seen at Hilton Head Island, S.C., 5 February—very early—Mrs. Alva Hines, fide Caroline Newhall.

Fish Crow, present at Raleigh, N.C., 12 March (early) in greater numbers than in previous years, H.L. Jones.

Winter Wren, 1 on window sill and at feeder at Greenville, N.C., 27 January, Edmund Welch.

Robin, mass migration through Greenville, N.C., area—first noted in numbers 20 January, reached peak of thousands on 3 February, Edmund Welch.

Olive-backed Thrush, 1 carefully observed at Jordan farm near Durham, N.C., 29 December 1965, Oliver W. Ferguson.

Cedar Waxwing, flocks numbering several hundred in the Hartsville, S.C., area, reached peak 20 to 27 February, Mrs. Pinckney King, Mrs. K.G. Kuehner, Mrs. A.E. Morrison, and Mrs. Paul Rogers.

Tennessee Warbler, 1 at Raleigh, N.C., 7 September 1965, early and unusual, Lee Jones.

Orange-crowned Warbler, 1 in Charleston, S.C. yard for the 19th consecutive winter, arrived late, 28 November 1965, Mr. and Mrs. Francis Barrington; 1 in yard at Winston-Salem, N.C., 25 through 27 March, Mr. and Mrs. Fred Hill and C. Royce Hough III.

Myrtle Warbler, scarce in the Hartsville, S.C., area this winter, Mrs. A.E. Morrison; unusually plentiful throughout the winter on Wadmalaw Island, Charleston County, S.C., B.R. Chamberlain.

Yellowthroat, 1 male 20 January and 1 female 25 January in Wake County, N.C., at locations 15 miles apart, Lee Jones.

Baltimore Oriole, female or immature male at feeder at Winston-Salem, N.C., 29 to 31 January, Barbara Page et al.; 1 female or immature male at Durham, N.C., feeder, 5 and 6 February, Mr. and Mrs. Oliver W. Ferguson; 11 (2 colorful males) at Summerville, S.C., feeder, January and February, Mrs. Louis Miles; 1 young male, Rock Hill, S.C., 24 January to 22 February, Mrs. Joe C. Moore.

Brown-headed Cowbird, 25 to 50, mostly males, Greenville, N.C., 26-30 January, Edmund Welch.

Painted Bunting, 1 female at feeder on Hilton Head Island, S.C., regularly through December 1965, last seen 2 January—first spring arrival on Hilton Head noted 27 March, Caroline Newhall.

Dickcissel, 1 male on Isle of Palms (Charleston), S.C., 12 January, Mrs. L.H. Jordan.

Grasshopper Sparrow, 1, Lake Benson, Wake Co., N.C., 7-21 January, Lee Jones.

Vesper Sparrow, 15 or more, Lake Benson, Wake Co., N.C., 31 December 1965 through 23 January 1966; not seen again in winter after snowfall of 25 January, Lee Jones.

Lark Sparrow, 6 at Kill Devil Hills, Dare Co., N.C., 29 December 1965, Lee Jones.

BOOK REVIEWS

The Birds of Kentucky. Robert M. Mengel. Ornithological Monographs No. 3, The American Ornithologists' Union. 1965. 581 p. Index. Illus. $10.00.

Here is a state bird book which is virtually a treatise on how such books should be written. In his introduction to *Birds of Kentucky*, Dr. Mengel clearly states his standards for the acceptance of records. It is interesting to note that he does not apologize for including some records not supported by specimens. He states that sight records are used "when one or more individuals of the species have been observed in the field, either on one occasion by three or more people (collectively capable, in my opinion, of making identification accurately), or on repeated occasions by one person (similarly deemed capable)." This statement is typical of Mengel's willingness to give the reader credit for being intelligent enough to understand the problems facing the author of a state bird book.

A description of the environment (physiography, soils, climate, vegetation) is followed by discussions of such topics as the distribution of breeding birds, recent changes in Kentucky avifauna, bird distribution in relation to environmental features, geographic variations in Kentucky breeding birds, and the history of ornithology in the state. Most state bird books devote no more than 25 or 30 pages to these aspects of bird study; Mengel uses 151 to good advantage.

The species list is concise almost to the point of austerity. The customary family descriptions have been omitted, and there is no routine information on field identification, modern field guides having made this superfluous. But there are facts, facts, facts—well organized with plenty of topical headings to assist the reader in finding the particular fact he needs to know. These headings vary from one species to another, but the arrangement follows a general pattern: status, spring, breeding records, breeding distribution, fall, winter, geographic variation, specimens examined. When needed, additional paragraphs give the history of the species in the state or miscellaneous notes on albinism, banding recoveries, behavior, and so forth. Discussion of subspecies is given under "geographic variation." There are only four colored plates, but there are many useful range maps and statistical tables.

Seventeen species are relegated to the hypothetical list. "Species listed under this heading," the author notes, "are all represented by actual records and in no case appear because of high probability of occurrence alone. For one reason or another, they fail to meet the standards . . . for inclusion in the main list." The hypothetical list is followed by a list of species recorded on inadequate grounds, including such dubious species as Audubon's "Carbonated Warbler."

In the writing of *Birds of Kentucky* Dr. Mengel exercised admirable self-discipline. Yet shining through all that scientific objectivity is his personal enthusiasm for going afield in Kentucky. The result is a decidedly superior state bird book which should be studied carefully by anyone preparing to compile a similar book for another state.—EFP

South Carolina Birds of the Foothills. Jay Shuler. Visulearn, 43 Kirkwood Lane, Greenville, S.C. 1966. 82 p. Index. Illus. $3.95.

Bird watchers in the western part of South Carolina are fortunate to have this attractively designed local bird list available for evaluating their own field observations. Generous margins in the text and additional space in the index allow room for the bird student to note his own records right along with those of the author and other experienced birders who contributed data. To make his book of the most value to inexperienced bird watchers, Mr. Shuler wisely avoided confusing terminology. Each bird listed is given a status (common, uncommon, rare, accidental), a season of occurrence (winter, summer, migrant, resident), and a habitat preference. This minimum information may be followed by brief comments on population trends, nesting habits, field identification, and so forth. The style is informal with the emphasis on the species typical of the area. The 16 colored plates are basically habitat studies of familiar birds, my favorite being that of the female Hooded Warbler with young in the nest.—EFP

The Giant Canada Goose. Harold C. Hanson. Southern Illinois University Press, Carbondale, Ill. 1965. 248 p. $9.75.

The author was much aware that the subspecies *Branta canadensis maxima* was listed in the 1957 AOU *Check-list* as: "Now believed to be extinct." However, his investigations of the Canada Goose led him to a different conclusion. Backed by old reports and observations, plus persistent rumors, the author—for 20 years a research biologist with the Illinois Natural History Survey—has made extensive studies of the Canada Goose. Early in 1962 he was convinced that the large race deserved definite treatment. The author presents formidable facts on this race of the Canada Goose, along with some information on other races. This book should be invaluable for any student of the subject.—HARRY T. DAVIS

The Bird: Its Form and Function. C. William Beebe. Dover Publications, Inc., 180 Varick Street, New York, N.Y. Republished 1965, originally published 1906. xi + 496 p. Index. Illus. Paperbound, $2.75.

This book is primarily interesting because it presages the many popular accounts of avian biology available today. Beebe's comparative and evolutionary approach to his subject still reads rather well in spite of the 60 years that have elapsed since the original publication. The pictures are not very attractive compared with the colored plates in most contemporary bird books, but they are adequate for illustrating the author's point in the text.—EFP

Bird Studies at Old Cape May. Witmer Stone. Dover Publications, Inc., 180 Varick Street, New York, N.Y. Republished 1965, originally published 1937. lii + 941 p. Index. Illus. Two volumes, paperbound, $2.75 each.

Witmer Stone Sanctuary was established on Cape May in memory of the author of this book. Dr. Stone was a versatile naturalist, but his name is inevitably associated with ornithology because, among many other accomplishments, he edited *Auk* for 25 years and was one of the founders of Delaware Valley Ornithological Club, the organization which originally published *Bird Studies at Old Cape May.* The present edition has been updated with an introduction by Roger Tory Peterson, a list of added species, and a biographical sketch of Dr. Stone. It is fortunate that this excellent reference is now available at a modest price for a new generation of bird students in the DVOC area and for traveling birders who will no doubt enjoy visiting coastal New Jersey all the more if they first see it in the pages of Witmer Stone's *Bird Studies at Old Cape May.*—EFP

The Bird Watcher's Quiz Book. Henry Hill Collins Jr. Dover Publications, Inc., 180 Varick Street, New York, N.Y. Republished 1965, originally published 1961. ix + 116 p. Paperbound, $1.00.

Material from this book might be the basis for several interesting bird club programs. Some quizzes are easy enough for elementary school children while others, such as those dealing with Latin and Greek roots of scientific names, are decidedly difficult. Text follows 1957 *AOU Check-list* except as noted.—EFP

Bird Display and Behaviour: An Introduction to the Study of Bird Psychology. Edward A. Armstrong. Dover Publications, Inc., 180 Varick Street, New York, N.Y. Revised republication of second (1947) edition. vii + 431 p. Three indices. Paperbound, $2.50.

Most bird watchers are relatively contented to be able to identify a good number of birds by sight and sound. From time to time they may notice courtship, territorial defense, bathing, and so forth, but they generally consider behavior studies to be beyond their scope. Here is an inexpensive book which goes a long way toward explaining the more commonly observed behavior patterns without plunging the amateur over his head in technical language. One chapter is devoted to courtship feeding, an activity easily seen at bird feeders. (This is an informative and enjoyable chapter in spite of a major typographical error in the last paragraph where apparently a revision was inserted but an intended deletion was not made.) Obviously some of the most impressive displays of avian behavior occur among colonial birds which few of us have an opportunity to observe; however, an awareness of their ceremonies can help us better appreciate the activities among the birds in our own yards. Advanced bird students particularly interested in behavior will find the bibliography of over a thousand items worth the cost of the whole book.—EFP

BY-LAWS OF CAROLINA BIRD CLUB, INC.

As Amended at the Regular Spring Meeting
Wrightsville Beach, N. C., 22 April 1966

ARTICLE I - MEMBERS

Section 1. Any person who is interested in the objects set out in the Charter may become a member of this club upon the written recommendations of a member in good standing and the payment of the dues required.

Section 2. Members may be:

a. STUDENT MEMBERS - those paying $1.00 per year.
b. REGULAR MEMBERS - those paying $2.00 per year, provided that, all members of an immediate family may become regular members upon payment of $3.00 for the family.
c. SUSTAINING MEMBERS - those paying $5.00 per year.
d. CONTRIBUTING MEMBERS - those paying $25.00 per year.
e. LIFE MEMBERS - those contributing $100.00, or paying four consecutive yearly installments of $25.00. Payments for life memberships shall be deposited in the Endowment Fund unless otherwise stipulated by the contributing member.
f. HONORARY MEMBERS - those whom the Executive Committee shall see fit to designate.

Section 3. Dues for each ensuing calendar year shall be payable on the preceding September 1st. Reminders to members who have not paid shall be mailed by the treasurer by November 1st. Members who have not paid dues by February 1st shall be suspended after an additional reminder from the treasurer and receive no further issues of The Chat until payment of their dues.

ARTICLE II - OFFICERS

Section 1. The Officers of this club shall be a president, 3 vice-presidents, a secretary, assistant secretary, and a treasurer. These officers, together with 6 members at large, elected from the general membership of the club, shall constitute the Executive Committee, which Executive Committee shall be charged with the management and operation of the business of the club.

a. The immediate past president shall be a member,ex officio, of the Executive Committee for a period of 1 year only.

Section 2. Nominations for officers shall be made by the Nominating Committee to the annual Spring Meeting; nominations may also be made from the floor at the meeting, provided that, each person whose name is placed in nomination shall, prior to balloting, signify his or her acceptance to run for office.

Section 3. Officers, except the vice-presidents, shall be elected to serve for a term of one year or until their successors are elected; and all officers shall be installed as the final item of business at the annual Spring Meeting. One vice-president shall be elected each year to serve for a term of three years. Two members at large shall be elected each year.

a. Vice-presidents and members at large shall be elected on a regional basis.

Section 4. All officers and members at large of the Executive Committee shall be elected by a majority of the votes cast at the regular annual Spring Meeting.

Section 5. Vacancies in any office of the Executive Committee shall be filled immediately by the Executive Committee pending the next regular election.

ARTICLE III - MEETINGS

Section 1. Regular meetings of the membership shall be held each Spring, Fall, and Mid-Winter at a time and place designated by the Executive Committee upon a minimum of 20 days written notice given to all members.

Section 1a. A minimum of 30 members qualified to vote and present at any regular or duly called meeting of the membership shall constitute a quorum for the purpose of conducting the business of the club.

Section 2. The Executive Committee shall meet within 60 days after the election of officers to plan work for the coming year. The Executive Committee and Committee Chairman shall also hold a joint meeting preceding the annual Fall membership meeting.

Section 3. Special meetings of the membership may be called by the president, the Executive Committee, or by a minimum of 30 members qualified to vote upon a minimum of 20 days written notice to the membership setting forth the time and place and the purpose for which the meeting is called. Membership lists shall be made available to any 30 members who intend to call a special meeting.

Section 4. Members attending regular or special meetings shall register at the place where the meeting is held.

Section 5. At all regular meetings a registration fee of 50 cents shall be collected from each member attending and sent to the treasurer to be deposited in the general fund.

Section 6. Any member qualified to vote may cast his or her vote by legal proxy on any specific issue duly presented to the membership, provided that, no person may cast a vote as proxy for another who is not then a member of the club and entitled to vote in his or her own name. All proxy votes shall be in the hands of the secretary at the time of balloting and shall be counted with the votes cast by the members attending, provided further, that a quorum qualified to vote is present to conduct the business of the club.

Section 7. A majority of the members present at any Executive Committee meeting shall constitute a quorum to conduct the business of the club.

ARTICLE IV - AFFILIATED ORGANIZATIONS

Section 1. Any club organized and devoted to the cause of conservation or protection of flora and fauna, or other natural resources in North and South Carolina, that desires to affiliate with this club may do so by sending a fee of $2.00 per year, together with a list of its officers to the treasurer. Any such club may send a voting representative to any regular or special meeting of the membership.

Section 2. Any club or industrial organization not specifically chartered or organized for such purposes as the Carolina Bird Club, may become affiliated with this club by contributing a minimum of $25.00 annually to the Sanctuary Fund, or to the Endowment Fund at their discretion. Such affiliated organizations shall receive all issues of The Chat, but shall have no voting privileges.

ARTICLE V - PUBLICATIONS

Section 1. The magazine and bulletin of this club shall be known as The Chat, and the Newsletter, respectively.

Section 2. The Editor of The Chat and the Newsletter shall be appointed by the Executive Committee to serve until his or her successor is named. The Editors of The Chat and the Newsletter shall hold no elected office while serving as an editor.

Section 3. The Executive Committee shall have the control and supervision of The Chat and the Newsletter, and shall establish editorial policies.

Section 4. All members in good standing shall receive the regular issues of The Chat and the Newsletter, provided that, where there is a family membership, only one copy of the publications shall be sent to the family.

Section 5. Each affiliated club shall receive one copy of the regular issues of The Chat and the Newsletter.

ARTICLE VI - COMMITTEES

Section 1. The Nominating Committee shall consist of 6 members and shall be appointed by the president within 90 days following his election and be so notified by letter. This committee shall represent the geographical area and membership of the club. The names and address of said committee shall be published in the following issue of The Chat, or the Newsletter.

Section 2. The president, with the advice of the Executive Committee, shall appoint the following committees;

a. Education Committee
b. Endowment Committee
c. Records Committee
d. Finance Committee
e. Membership Committee
f. Public Relations Committee
g. Sanctuary Committee

and such other committees as the Executive Committee shall from time to time direct. An announcement of the appointment of said committees shall be published in The Chat or the Newsletter as soon as possible following the election of officers.

Section 3. The Finance Committee shall develop and execute plans towards promoting and increasing a special fund through voluntary contributions, bequests, and donations for the exclusive use for the management and operation of the sanctuary* and for such other special financing not otherwise provided for.

Section 3a. The Endowment Committee shall develop and execute plans toward promoting and increasing the Endowment Fund. The Endowment Committee shall consist of 7 members. It may be headed by a single chairman or jointly by an Endowment Promotion Chairman and an Endowment Investment Chairman. The chairman, or chairmen, to be appointed for a 3-year term of office subject to reappointment. Two (2) of the members to be appointed for a 2-year term and the remaining members to be appointed for a one year term. The earnings from the Endowment Fund may be used for whatever purpose the Executive Committee may approve.

Section 4. The Education Committee shall plan and execute the educational program of the club as approved by the Executive Committee.

Section 5. The Regional vice-president, in addition to his other duties, shall act as the Field Trip Director and shall make all advanced arrangements for field trips in his region as have been approved by the Executive Committee.

Section 6. The Sanctuary Committee shall be responsible for the maintenance, management, and operation of the sanctuary* and for developing and executing plans for the improvement and development of the sanctuary* as approved by the Executive Committee.

Section 7. The Public Relations Committee shall announce and report the activities of the Club.

*or sanctuaries, in the event that more than one sanctuary shall be obtained.

Section 8. The Membership Committee shall develop and execute plans for the increase of membership of the Club as approved by the Executive Committee.

Section 9. The President shall appoint or engage an experienced auditor to audit the books of this club within 30 days after the close of the fiscal year.

Section 10. The Records Committee shall consist of 3 members, The Editor of The Chat, and the chairmen from the North and South Carolina Records Committees, appointed by the Executive Committee to serve until their successors are named. The Records Committee shall carefully screen all bird reports as to their authenticity for publication in the official bird list of the club. Each chairman of the North and South Carolina Records Committee may function independently of the Carolina Bird Club Records Committee in regards to the need of their respective States. The Editor of The Chat shall act as coordinating chairman of the CBC Records Committee.

ARTICLE VII - DUTIES OF OFFICERS

Section 1. The president shall preside at all meetings of this club and the Executive Committee, and shall perform such duties as regularly pertain to the office; he shall be, ex officio, a member of all committees except the Nominating Committee.

Section 2. In the absence of the president, the vice-president longest in office shall preside; in his absence, the vice-president next longest in office shall preside; and the same shall apply to the third vice-president.

Section 3. The secretary shall keep the minutes of all meetings of this club and the Executive Committee, keeping 1 copy in the minute book and providing the president a copy of said minutes within 2 weeks following each meeting; shall maintain a list of all committee members; shall provide all members adequate notice of each meeting and field trip; shall turn over the club records to his successor within 10 days of his successor's election.

Section 4. The treasurer shall have charge of all the monies of this club excepting the Endowment Fund; shall collect all dues; shall deposit all funds in a bank approved by the Executive Committee; shall pay all bills not recognized in the budget upon written authorization by the President or the Executive Committee; shall keep a permanent record of all receipts and all disbursements; shall give a written report thereof to the annual Spring meeting and at such other times as the president shall require. The treasurer shall turn over to his successor within 10 days after his election all books, records and funds belonging to this club which are in his hands. The records of the treasurer shall, upon change of office, be audited in such a manner as the president, or the Executive Committee shall direct. At the expense of the club the treasurer shall provide such bond for faithful performance of his duties, as the Executive Committee shall require. The treasurer shall be ex officio, a member of the Finance Committee.

Section 5. Each officer or committee member having in his or her possession books, records, funds, or other property belonging to this club shall, within ten (10) days after his or her resignation, retirement, or termination of office, turn over to his or her successor, or to the Executive Committee, all such items.

ARTICLE VIII - AMENDMENTS

Section 1. These By-Laws may be amended by a majority of the votes cast at any regular meeting of the membership, or at a special meeting called for the purpose, provided that, the proposed amendment has been submitted to the Executive Committee and copies thereof sent to all members at least 20 days prior to the meeting at which it is to be voted upon.

ARTICLE IX - PROCEDURE

Section 1. The business of this club shall be conducted in accordance with Robert's Rules of Order, latest edition.

ARTICLE X - EXPENSES

Section 1. The normal office expenses of the elected officers and any appointed committee or appointee, which are incidental to and in the furtherance of the club's business, shall be reimbursed by the treasurer as approved by the Executive Committee. Travel and lodging expenses are excluded unless specifically authorized by the Executive Committee prior to such travel or lodging.

NEWS AND COMMENTS

Jay Shuler, of Greenville, S.C., was elected president of CBC at the Spring Meeting held 22-23 April at Wrightsville Beach, N.C. Jay is at present in Wyoming, where he is working as a Ranger Naturalist in Grand Teton National Park. He will return to Greenville in time to get everything lined up for the Fall CBC Meeting.

Other highlights of the Spring Meeting included the presentation of an Honorary Membership and a silver cigar box to Harry T. Davis; the adoption of amendments to the By-Laws; and an illustrated program by Dr. Arthur W. Cooper, of the Botany Department of N.C. State University, on "Coastal Ecology and its Relations to Land Management." Dr. Cooper has since been appointed by Gov. Dan K. Moore to head a special coastal studies project. In the field members were able to observe a Gray Kingbird which obligingly remained near the road in the vicinity of Fort Fisher. Those making the offshore boat trip were thrilled to see approximately 2,000 Red Phalaropes and a few Northern Phalaropes. It was a truly memorable meeting. Congratulations and appreciation to members of the host Wilmington Natural Science Club.

Headquarters News

Miss Emma Walker of Columbia, S.C., has agreed to live at the Sanctuary and serve the club as Headquarters secretary. She is presently in the process of moving.

CBC President Jay Shuler has named E.W. (Ed) Winkler of Raleigh, N.C., acting chairman of the Sanctuary Committee. Ed visited the Sanctuary in early June to take care of some maintenance jobs and to make plans for future development of the property.

Support Your Sanctuary

Finance Chairman William McIntosh reminds members that the Sanctuary needs their support both in the form of unrestricted gifts for maintenance and operations and in endowment. Contributions are deductible for income tax purposes and should be sent to Treasurer Wendell P. Smith, 911 E Street, North Wilkesboro, N.C.

Carolina Bird Club
INC.

Founded 6 March 1937 **Incorporated 8 August 1949**

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

MEMBERSHIP

The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. The several classes of membership are listed below. Checks should be made payable to Carolina Bird Club, Inc., and sent to the Treasurer.

Regular Membership	$ 2.00
Family Membership	$ 3.00
Sustaining Membership	$ 5.00
Contributing Membership	$ 25.00
Life Membership	$100.00
(Payable in four consecutive annual installments.)	
Student Membership or Library Subscription	$ 1.00
Affiliated Club	$ 2.00

THE CHAT

The Chat is published quarterly in March, June, September and December as the official bulletin of Carolina Bird Club, Inc. All members not in arrears for dues receive *The Chat*. Subscription price to non-members is $1 per volume; single copies, 30 cents. All correspondence concerning memberships, changes of address and back numbers should be sent to CBC Headquarters, P.O. Box 1220, Tryon, N.C. 28782. Please notify Headquarters immediately of change of address.

All papers, census reports and notices for publication in *The Chat* should be sent directly to the Editor. However, items intended for the General Field Notes, Backyard Birding, or Conservation departments should be sent to the respective department editors.

OFFICERS

President ________ James B. (Jay) Shuler, 43 Kirkwood Lane, Greenville, S.C.
Vice-Presidents ________ Richard (Sandy) Siler, Route 2, Seven Springs, N.C.
C. Garvin Hughes, 1250 Fifth St. NE, Hickory, N.C.
Secretary ________________ Miss May Puett, P.O. Box 1395, Greenville, S.C.
Treasurer ____________ Wendell P. Smith, 911 E Street, North Wilkesboro, N.C.
Executive Committee Members-at-Large:
Region I—Western North Carolina:
Linville Hendren, Elkin, and Mrs. William C. Cobey, Charlotte
Region II—Eastern North Carolina:
John L. Lamson, Raleigh, and Jack Potter, Zebulon
Region III—South Carolina
T.A. (Ted) Beckett III, John's Island, and E.C. Clyde Jr., Effingham

The Chat

Bulletin of the Carolina Bird Club, Inc.
Vol. 30 September 1966 No. 3

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Birds

The Chat

Volume 30 **September 1966** **Number 3**

Published by the Carolina Bird Club, Inc.

Editor ______________________________ Eloise F. Potter, Box 277, Zebulon, N.C.
General Field Notes ___ James F. Parnell, Wilmington College, Wilmington, N.C.
Backyard Birding __________________ Annie Rivers Faver, Rt. 2, Eastover, S.C.
Conservation ____________ Gladys Buckner, 500 West Ave., North Augusta, S.C.
Editorial Board ________________________ Thomas L. Quay, Charles H. Blake
Contributing Editors __________________________ John K. Terres, Jack Dermid,
John Henry Dick, and Alexander Sprunt Jr.
Associate Editors ______________________ Thomas W. Simpson, Kay C. Sisson,
Ernest Cutts, and Adair M. Tedards

THE CHAT is published quarterly (March, June, September, and December) by the Carolina Bird Club, Inc., with headquarters at the Club Sanctuary, P.O. Box 1220, Tryon, N.C. 28782. Second class postage paid at Tryon, N. C. 28782 and at additional mailing offices.

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OUR COVER—Graceful hardwoods arch above the circular drive approaching the house at the CBC Sanctuary near Tryon, N.C. See page 70 for more information about the Sanctuary, and come to the Fall Meeting 21-23 October to enjoy the beauty of the entire 83 acres. Photo by Ida Lee Winkler.

NOTES ON THE FINCH WINTER OF 1965-1966

Robert P. Teulings

During this last winter my wife and I spent many busy—sometimes hectic—hours banding Evening Grosbeaks, Purple Finches, and Pine Siskins at Chapel Hill, North Carolina. We can personally testify that in our own area we witnessed a good grosbeak and finch season. It is difficult to judge from the reports received from other localities in the Carolinas whether the overall wintering populations were larger than in past years, but there is certainly no doubt that the 1965-1966 invasion of Fringillidae was one of major proportions. One indication of the magnitude of the flight comes from the 1965 Christmas count which shows tallies of grosbeaks, finches, and siskins exceeding those recorded in the Carolinas during the last large-scale invasion two years ago.

Table 1. *Relative abundance of certain finches on recent Christmas Bird Counts in the Carolinas.*

	1963	1964	1965
Observers/Parties	286/100	388/122	400/131
Evening Grosbeak	284	11	840
Purple Finch	863	204	1889
Pine Siskin	3348	16	5766

In what follows I will review some highlights of the season. The information is based on personal records as well as communications received from around the region. All contributors are acknowledged at the end of the article.

Evening Grosbeaks

These visitors from the north seem to have established a more or less regular two-year cycle for their forays into the Carolinas, with occasional strays coming in between the major flights. The winter of 1965-1966 was one of the biennial peak seasons. Grosbeaks were distributed from coastal North Carolina to the mountains and as far south as Aiken, South Carolina. Tallies made on the Christmas and spring counts showed substantial numbers present in the North Carolina piedmont. Estimates of local wintering populations across the piedmont ranged from many hundreds (more than ever before) at Elkin in the northeast to two hundred or less (well below the 1963-1964 population) at Southern Pines toward the southeast.

At Greenville, N.C., in the coastal plain, Edmund Welch observed grosbeaks in his yard daily through February, March and April in flocks ranging up to 40 birds.

Reports have also come from three widely separated locations in South Carolina. At Hartsville, northwest of Florence, grosbeaks were regular visitors at feeders all over town during the height of the season. The peak there occurred in late February. Mrs. A.E Morrison counted over 100 grosbeaks waiting to be fed early on the morning of 20 February. In Anderson County in the western section, grosbeaks did not arrive early enough to be tallied on the Christmas count, but they were present later in the winter and some lingered there until the end of April. Farther south at Aiken, grosbeaks were recorded briefly late in the season when a small flock of 11 arrived at Mrs. Chauncey Hardy's feeder on 4 April and stayed in the vicinity for about 10 days.

Some arrival dates at various locations in North Carolina were:

25 October	Bodie Island
6 November	Chapel Hill
7 November	Charlotte
13 November	Southern Pines
14 November	Statesville, Zebulon

Although the vanguard of grosbeaks arrived early, regular visits to feeders usually did not begin until mid-December or later. In Chapel Hill, for example, the first birds were seen on 6 November but it was the last day of December before my wife and I trapped and banded any grosbeaks at our well-stocked feeders. The obvious explanation is that the birds sought out and devoured the available wild food supply before becoming habitues at feeding stations. Jay Carter reports that "when the grosbeaks first appeared on the outskirts of Southern Pines [N.C.], they preferred pine seeds, even when sunflower seeds were in feeders directly below them. Other natural foods the grosbeaks were observed eating were tulip poplar seeds and dogwood berries. After their first few weeks in the area, the grosbeaks were coming to feeders and feeding almost exclusively on sunflower seeds." In a similar vein, Eloise Potter writes that although grosbeaks arrived in Zebulon, N.C. in mid-November, they were not present in large numbers at her station until after the snowfall of 25-26 January. Thereafter 30 or more were usually present for part of each day until late April.

The winter wanderings of Evening Grosbeaks have long been a puzzle. Slowly, as more grosbeaks are banded and later recovered, their seasonal movements will become better defined. Reports of banding activities this last winter are available from Raleigh, Zebulon, and the Durham-Chapel Hill area of North Carolina. A total of almost 200 grosbeaks were banded at these three locations. Information is tabulated below on nine recoveries of banded birds.

TABLE 2. *Evening Grosbeak recoveries.*

Date Banded	*Sex*	*Banding Location*	*Date Recovered*	*Place Recovered*
15 June 1962*	F	West Branch, Quebec, Canada	23 February 1966	Zebulon, N.C.
27 December 1963	F	Strasburg, Virginia	11 March 1966	Raleigh, N.C.
18 January 1964	F	Denton, Maryland	31 March 1966	Zebulon, N.C.
24 April 1964	F	Zebulon, N.C.	13 January 1966	State College, Penna.
13 March 1965	M	Sterling Junction, Mass.	26 April 1966	Zebulon, N.C.
14 April 1965	M	Marquette, Michigan	23 March 1966	near Durham, N.C.
10 October 1965	M	Milo, Maine	7 February 1966	near Durham, N.C.
23 March 1966	F	near Durham, N.C.	14 June 1966	Astle, New Brunswick, Canada
11 April 1966	M	Zebulon, N.C.	14 May 1966	Enfield, Me.

*Banded as an adult, this bird could have been no less than 4½ years old when retaken.

Several of the items are of special interest because of the evidence they provide about migration. A grosbeak banded by Elizabeth Teulings near Durham, N.C. on 23 March of this year was retrapped 83 days later on 14 June at Astle, New Brunswick, Canada, almost 1,000 miles to the northeast. This bird evidently migrated along the Atlantic seaboard, as did the grosbeak which flew down from Milo, Maine. However, it has been previously recognized that some of the Evening Grosbeaks wintering in the Carolinas probably travel across the Appalachian Mountains (*Chat*, 28:69-71, 1964). An example from the present data lends additional support to this conclusion: the bird banded in Marquette, Michigan last spring which was retaken near Durham on 23 March of this year.

A final note on Evening Grosbeaks comes from Wendell, N.C. Among a large flock at Mrs. Cecil Perkins' feeder on 5 January was an albino grosbeak with a conspicuous yellow band across the back of its neck. This bird was seen by several observers in addition to Mrs. Perkins.

PURPLE FINCHES

Detailed information comes mostly from banding operations.

At Chapel Hill my wife and I banded 2,609 Purple Finches between 1 November and 7 April. This large number is compared to 448 banded during the previous winter at the same location. This shows the marked contrast between last season's major invasion and the "off year" of 1964-1965. The following table gives the 1965-1966 monthly totals of Purple Finches banded at our station.

Nov.	*Dec.*	*Jan.*	*Feb.*	*March*	*April*
16	222	597	544	1,132	98

Although we captured our first bird of the season on 1 November, the influx of Purple Finches did not become really evident until mid-December. Thereafter the number of finches visiting our station built up steadily, reaching a peak at the end of January when large flocks came in for food following heavy snows. For several days during the period of bad weather, flocks of 200 or more were massed at our feeders. We trapped and banded as many birds as we could safely and conveniently handle—312 during the last week of January alone. The pace slackened somewhat as the weather moderated, but the number of finches banded during February still exceeded by almost 100 our total for the entire previous winter. Activity again increased in March; eleven times during the month we banded more than 50 birds per day. Finally, with some relief, we noted a sharp decline in the Purple Finch population during the first week of April. By 27 April the last stragglers had left our area.

Another banding report comes from Mrs. Potter in Zebulon, N.C. Between 21 December and 4 April, 61 Purple Finches were banded at her station. Mrs. Potter commented that many times that number could have been banded if she had been able to devote more time to the project. She recorded three returns of finches banded at her station two winters ago, and three from the 1964-1965 season.

An exciting event for any bander is to trap a bird previously banded by someone else. The banding activity at Chapel Hill and Zebulon resulted in five such records:

TABLE 3. *Purple Finch recoveries.*

Date Banded	*Sex*	*Banding Location*	*Date Recovered*	*Place Recovered*
30 March 1963	M	Granby, Mass.	20 February 1966	Chapel Hill, N.C.
8 March 1964	M	Effingham, S.C.	4 February 1966	Chapel Hill, N.C.
12 April 1964	M	Monkton, Maryland	31 March 1966	Zebulon, N.C.
7 May 1965	M	South Dartmouth, Mass.	25 March 1966	Chapel Hill, N.C.
21 August 1965	M	Westport Point, Mass.	3 March 1966	Chapel Hill, N.C.
20 January 1966	–	Chapel Hill, N.C.	1 June 1966	Lincoln, Mass.
4 February 1966	–	Chapel Hill, N.C.	19 May 1966	Patten, Maine
24 March 1966	M	Chapel Hill, N.C.	24 May 1966	Prospect Harbor, Maine
25 March 1966	M	Chapel Hill, N.C.	2 May 1966	Storrs, Conn.

In addition to these, we have an interesting item from E.C. Clyde Jr. In January 1964, Mr. Clyde banded an adult male Purple Finch (#70-71771) at his station in Effingham, S.C. The following year this bird was captured in Chapel Hill, N.C. (Teulings, 26 February 1965). Then this past winter—for the third consecutive year—Purple Finch #70-71771 again returned to the Carolinas, this time to Effingham where it was originally banded (Clyde, 2 February 1966).

Mrs. A.E. Morrison reported from Hartsville, S.C. that Purple Finches were abundant in her locality especially during February and early March. The numbers were comparable to the last major flight in 1963-1964. Finches were first sighted in Hartsville on 23 November and some stayed through the third week in April.

Mrs. Morrison observed that many of her finches began feeding on suet in mid-March before their departure. This behavior has been noted by others

(*Chat,* 28:72, 1964), and is evidently not unusual in preparation for the northward migration.

In competition with Evening Grosbeaks at feeders, the Purple Finches seemed to come out second best. Mrs. Morrison remarked that dozens of finches fed regularly at her station, but they got their share of sunflower seed only after the morning contingent of grosbeaks had departed for the day. Edmund Welch (Greenville, N.C.) saw his flocks of finches decline and disappear as the numbers of grosbeaks increased. No finches visited his feeder after 7 March, and he believes they were simply crowded out by the Evening Grosbeaks.

House Finches

From a well-established colony on Long Island, New York, the House Finch *(Carpodacus mexicanus)* appears to be rapidly expanding its range along the east coast. This species was first recorded as far south as North Carolina during the winter of 1962-1963 when Eloise F. Potter discovered a male House Finch in her yard at Zebulon. House Finches were recorded again at Zebulon the following winter. Now this year, thanks to the work of banders, we can add two new records from other North Carolina locations. A male House Finch was captured near Chapel Hill by Elizabeth Teulings on 23 February 1966 *(Chat,* 30:53, 1966). Four days later in Raleigh three more House Finches were trapped at a banding station operated by Marjorie Duffield.

The male House Finch from Chapel Hill and a female captured by Mrs. Duffield were collected. These specimens are now in the study collection at North Carolina State University in Raleigh.

As the eastern population of *Carpodacus mexicanus* continues to grow, there is every reason to expect increasing incursions into CBC territory. All of us should learn the field marks of the House Finch and watch our feeders closely. An article on House Finches can be found in the September 1964 issue of *The Chat* (28:63-68). *Birds of North America, A Guide to Identification* (Robbins, Bruun, Zim, and Singer, Golden Press, $2.95) has an excellent colored plate showing the House Finch and the species with which it might be confused. (See review elsewhere in this issue.)

Pine Siskins

Statistics from the Christmas and spring counts indicate that siskins were present in substantial numbers throughout the piedmont section of North Carolina during the 1965-1966 winter season. Etta Schiffman, writing in the June *Chat* (30:46-48), described it as a "siskin year" in Greensboro, and E.M. Hodel of Elkin estimated a larger population of siskins in his area than in any previous winter.

At Greenville, N.C. in the coastal plain, siskins appeared in late January and left in late March (Edmund Welch). They were not reported anywhere in the coastal plain on the spring count except from Fayetteville where eight were recorded on 2 May.

The extent to which siskins ranged into South Carolina is not clear from the limited information at hand. Siskins were reported around Anderson and Greenville, but I do not know where else they were found in the state. Mrs. A.E. Morrison writes that no siskins were seen this last winter by any of the bird watchers in the Hartsville area.

Looking at my own records for Chapel Hill I note that Pine Siskins were first seen on 7 November and that flocks as large as 100 birds were observed by mid-December. My wife and I anxiously awaited their appearance at our feeders so that we could begin banding them. We trapped our first siskin on 17 January and thereafter banded a total of 174 before their departure on 11 May. The banding pace never reached "blitz" proportions as happened with Purple Finches. There were seldom more than a half dozen siskins in our yard at a time, and only two or three new siskins a day were banded through February, March and April. However, this rate abruptly tripled during the first week of May, perhaps due to a surge of north-bound migrants. All the siskins had departed by 11 May.

Pine Siskins displayed a characteristic tameness which greatly appealed to us. Handling these little birds during banding, we found them very docile and seemingly unperturbed by being trapped and examined. Cracked hickory nuts proved to be an irresistible attraction for the siskins, and the birds would sometimes dart directly back to the feeder after being banded.

The plumage of siskins deserves comment. The illustration in Peterson's *Field Guide* shows rather conspicuous yellow coloring at the base of the wing feathers and in the tail. However, among the birds we banded, less than 5% (8 out of 174) were so well marked. The yellow was largely concealed in the great majority of birds, and almost totally lacking in a few individuals. A siskin captured on 26 March showed quills of new crown feathers—the beginning of spring molt. After that date at least a dozen more siskins were seen with head feathers in various stages of molt.

Eloise Potter of Zebulon, N.C. banded 16 siskins between 10 March and 4 April. None of the 85 siskins banded at her station a year ago returned this winter.

Common Redpolls

In Chapel Hill, N.C. a flock of 15 to 20 Common Redpolls was seen on the campus of the University of North Carolina on 27 January by Joseph P. Jones. Ten inches of snow had fallen during the preceding day. A week later, on 3 February, a second sighting was reported in Chapel Hill, this time by Mrs. Charles Wales who spotted a redpoll among a mixed group of Purple Finches, Slate-colored Juncos, and White-throated Sparrows at her backyard feeder. This bird continued to be a regular visitor for about 10 days while snow still covered the ground. Mrs. Elizabeth Teulings saw the bird in Mrs. Wales' yard on 9 February and corroborated the identification.

Redpolls were recorded at two other North Carolina locations on the Christmas and spring counts. Five were sighted on 2 January in the Great Smoky Mountains National Park 2 miles south of headquarters (Mary Enloe) and one bird was tallied in Greensboro on 1 May 1966.

Crossbills

The only reports of crossbills to come to my attention are those from the March issue of *Chat:*

The 1965 Christmas count carries a record of Red Crossbills and White-winged Crossbills from the Great Smoky Mountains National Park (*Chat,* 30:18,22, 1966). Outside the mountains we have only the report of Red Crossbills in Charlotte, N.C. on 23, 24, and 26 December and 2 January (*Chat,* 30:33, 1966).

Appendix

A list of those who contributed to this report:

Jay Carter
E.C. Clyde Jr.
Louise Crumpacker
Harry T. Davis
Mrs. Marjorie Duffield
Susan and Ashby Fristoe
Robert M. Geist
John B. Hatcher
E.M. Hodel
Alexander Hull
Joseph P. Jones
Mrs. A.E. Morrison
Mrs. Paul Payne
Mrs. Cecil Perkins
Eloise F. Potter
Mrs. W.G. Ragsdale Jr.
Robert B. Sharpe
Elizabeth and Robert Teulings
Mrs. Charles Wales
Edmund Welch
Mrs. W.C. Williams

Route 2
Chapel Hill, North Carolina
15 August 1966

CBC SANCTUARY NOTES

Emma V. Walker

The first week in May I left Columbia, S.C. in my station wagon loaded with a day bed, blanket, three aluminum chairs, a few kitchen utensils, hot dogs, rolls and Cokes, wondering what life would be like in an empty two story house near Tryon, N.C. The word "Sanctuary" didn't add much to my anticipation—rather, I was wondering if I could carry out my promise to the Sanctuary Committee, that I would live at the Sanctuary as much as I *could* until such time as arrangements of a more permanent nature can be made. At present I am here to look after the house, help keep the swimming pool clean, and assist anyone in any way I can who would like to visit the Sanctuary.

When I arrived, I contacted Col. Norme Frost who gave me a key and helped me unload the wagon—and any misgivings I may have had vanished when I realized that any assistance I might need was as near as the telephone. I'm sure no one realizes how much Col. Frost has been doing, and is doing, toward looking after our Sanctuary.

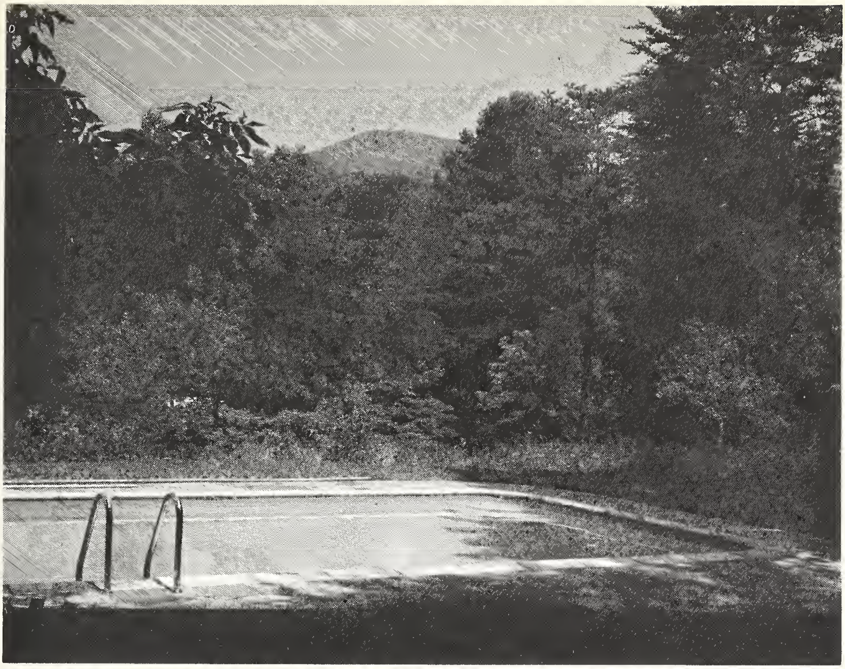
The first morning, to my surprise, I awoke to the ringing of the "Eee-o-lay" of the Wood Thrushes. Then the word "Sanctuary" took on a new meaning. So many Wood Thrushes in one place I have never heard. The deep woods, the tall trees around the house, the territory down by the barns, the woods beyond the swimming pool—all rang with their melody. For the first two weeks in May they dominated the early morning and late evening choirs. The Brown Thrashers, vireos, Indigo Buntings, wrens, Cardinals, Summer Tanagers, towhees, and Song Sparrows were also among the outstanding songsters, but none with the resonant quality of the Wood Thrush. No choir of human voices ever poured out such ecstacy! By the middle of May, with the nesting season in full swing, a few voices seemed to be missing, and the early morning chorus didn't last quite so long—there was work to be done, but all through the day there was singing to be heard, males who had completed their nest building chores, whose mates were incubating the eggs, burst forth their notice to the feathered world of their squatters rights for the season, stay out! And at intervals during the day the Bob-whites and Mourning Doves would make their presence known, even coming up near the kitchen window feeding on the chick scratch I had scattered. They didn't know the chick scratch was there, but two inches of sunflower seed hulls around the house is evidence that the kind donor of our Sanctuary had for years donated such handouts as to make the place a Sanctuary, not just in name, but in fact. And the squirrels and rabbits show evidence that they, too, are accustomed to the free lunch.

The month of May I divided between the Sanctuary and Columbia while I was changing my residence from Columbia to Lake Murray. Each week the wagon returned loaded with the necessities of life—such as card tables (the first week I sat in one chair and ate in the other), radio, TV, more cooking utensils, vacuum cleaner, and yard rake. The first trip was spent cleaning house, the next cleaning yard, and after that, as the days grew warmer, it seemed that the one necessary item on the agenda was to find out

"How the robin feeds her young,
How the oriole's nest is hung," etc.

Then to my great delight one afternoon I found the goldfinches. I read that they do not build until late summer when the thistle down is available for lining their nests. So they are rollicking and feeding and singing over the meadows while most other birds are busy with their home-making chores.

Just around the premises of your Sanctuary you can spend many interesting hours in the spring. Only yesterday four baby Wood Thrushes left their nest



From the swimming pool at the CBC Sanctuary one can see a ridge approximately 2,800 feet above sea level on the western boundary of the property, and beyond it rises a mountain peak. (Photo by Ida Lee Winkler)

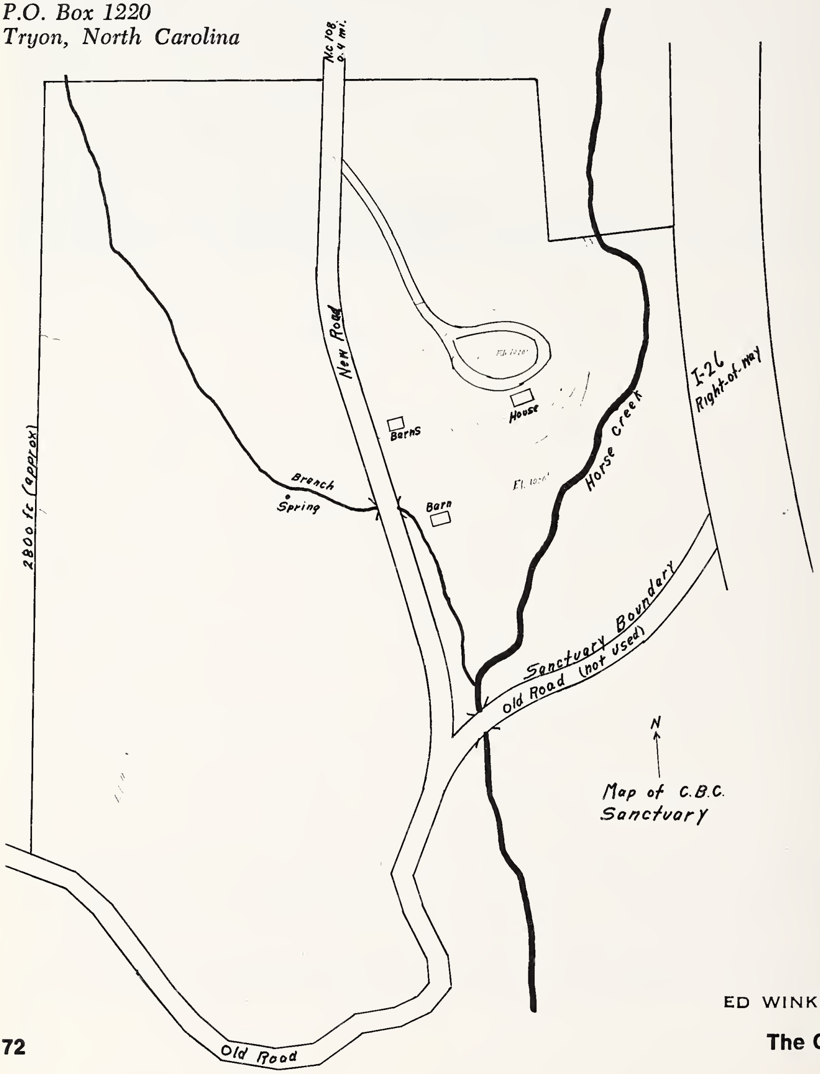
only 15 feet from the drive that circles up to the house. One had been anxious to leave—he had been sitting on top of the nest all day. Having seen the outside world, he declined to return to the cradle. Just over the driveway between the house and garage, a Summer Tanager is incubating in a sweet gum, and not 40 feet away in another sweet gum a Red-eyed Vireo's nest is swung. She too is incubating. On the outside of the nest can be seen two newspaper clippings which could be read with high powered binoculars. Under the garage an Eastern Phoebe is setting on five tiny white eggs. She is very tame and hangs around the swimming pool catching insects. About 10 feet away, a Carolina Wren decided to share the garage apartment with her. Also on a ledge above the basement door another pair of wrens are building. How so small a bird carries such large twigs is a marvel!

On the opposite side of the house in a tremendous running rose which encircles a pine, a Brown Thrasher is incubating, and 20 feet away in a rose that covers both sides of a fence, a Cardinal. Upon approaching the heavy florabunda rose one morning, among whose branches are the remnants of several nests of yesteryear, I was given a terrific scolding by a pair of Rufous-sided Towhees which are very tame. The nearer I approached the rose, the nearer they flew around me. When they were three feet from me across the fence I was astonished to find I was almost touching one of their babies, sitting there like a statue among the roses. I had never seen a baby towhee, and would surely have taken it for a thrasher for its breast was grayish brown streaked. I quietly retreated and put them at ease.

It didn't take long for the towhees to scatter the 15 piles of trash I raked up around the yard. Thrashers, when feeding, toss the leaves from side to side with their beaks, but towhees scratch like a mother hen. It's amazing to see how much one tiny bird can scatter with one scratch, and when they are so occupied, they pay little mind to a passer-by.

The thrashers, one of our very sweet songsters, seem to be the most numerous birds around the Sanctuary. Almost any time of day this week I could walk around the house and find a thrasher feeding her young. I wonder where so many of them nested! As I sat writing by the window one afternoon, a baby thrasher waited in a bush by the drive—waiting, looking about—"Oh, where is my Mama? She's been gone so long, and I'm so hungry." Along came a Wood Thrush. The baby thrasher ruffled her feathers and hopped along the limb eyeing the thrush with great anticipation. The thrush stopped, gave her the once over, "You're not of my breed", and she hopped disdainfully across the lawn. The little thrasher looked so disappointed and woe begone—"Deserted, I've been deserted". But she hadn't been deserted! Just before dark I saw Mama in a nearby bush stuffing her with luscious grubs.

31 May 1966
P.O. Box 1220
Tryon, North Carolina


N.C 108
0.4 mi.
New Road
El. 1010'
House
Barns
Barn
El. 1000'
Branch
Spring
Horse Creek
I-26
Right-of-way
2800 ft (approx)
Sanctuary Boundary
Old Road (not used)
N
Map of C.B.C.
Sanctuary
Old Road

ED WINKLER

CONSERVATION

AN EXAMPLE OF COEXISTENCE

Gladys Buckner

It is scarcely to be expected that a wildlife site that offers the best birding and fishing opportunities within the immediate environs of an expanding city should be a sort of by-product of a big industry. Such a site, however, known as the Merry Brick Yard, has evolved and grown in dimensions along with the growth of the Merry Brothers Brick and Tile Company of Augusta, Georgia.

This organization is the largest single brick manufacturing plant in the southeast with an annual production capacity of 225 million bricks. It operates 24 hours a day, 365 days a year, and has an employee payroll of some 750 to 800. With its huge annual payroll together with the amounts spent on operation it contributes substantially to the economy of the Central Savannah River Area. Yet, in the midst of busy activity attendant upon such a business 176 different species of birds including 57 species of nesting birds are unmolested during the four seasons, and fishermen find the supply of fish sufficient to challenge their sportsmanship.

The business, started by three Merry brothers in 1899 and now operated by the third generation, has been located since 1904 on the Georgia side of the Savannah River. Most of the clay for the brick and tile comes from the flood plain of the Savannah. Since 1904 excavations have extended over one square mile, the depth of the excavations varying from 6 to 25 feet with an average depth of 15 feet. At different depths springs boil up and form ponds. These ponds are well stocked with bream, catfish, and trout which were first introduced when the Savannah flooded prior to the building of a levee in 1912 and restocked in 1929 when a severe freshet broke the levee and again inundated the brick yard. These ponds offer convenient fishing opportunities to local fishermen who, on paying a nominal fee, can be seen any day casting their lines from the shores or from small boats on the water.

In winter the ponds attract waterfowl which include the Black Duck, Gadwall, Pintail, Blue-winged and Green-winged Teal, Bufflehead, Lesser Scaup, American Widgeon, Ring-necked Duck, Canvasback, Mallard, Shoveler, Redhead, Hooded Merganser, Ruddy Duck, and Wood Duck as well as the American Coot and Pied-billed Grebe which two remain to nest.

Against the protective brown of the dead sedges and marsh plants that edge the ponds the American Bittern or the Least Bittern freezes into immobility at the suggestion of an alien presence. The Common Gallinule weaves among the cattails; the Great Blue Heron, the Little Blue Heron, the Common and Snowy Egret, and even the Glossy Ibis wade in the shallow waters, and sandpipers, Killdeer, and yellowlegs skitter over sand spits and little islands within the ponds. In the marshy fields the Common Snipe digs and delves, and the Cattle Egret searches for small frogs which he swallows head first as the victim frantically kicks his hind legs in protest.

Overhead the Ring-billed Gull, the Red-tailed, Red-shouldered, and Marsh Hawks and the Black and Turkey Vultures flap and sail. The Sparrow Hawk rests momentarily on a telephone wire, and across a remote pond the Black-crowned Night Heron perches motionless among the trees that crowd to the water's edge. Nests of the Green Heron and the Yellow-crowned Night Heron have been found in this area.

But much of the brick yard site consists of wooded areas which provide habitat for smaller birds and through which a Barred Owl may wing noiselessly. Bluebirds compete with chickadees and titmice for squatter rights in tree hollows. Goldfinches, kinglets, and Blue-gray Gnatcatchers restlessly flit in search of food. Blackbirds—red-wings, rusties, grackles, starlings—clatter among the interlacing branches.

The Field Sparrow is a permanent resident, but in winter the Song, Vesper, Swamp, Savannah, and Fox Sparrows are commonly seen. Of the other finches the Painted Bunting with its red-purple-green coloring excites interest when it appears in time for spring nesting with the more modestly colored Indigo Bunting and Blue Grosbeak.

During migration various warblers are seen. The Palm, Yellowthroat, Myrtle, and occasionally the Yellow-throated and Orange-crowned remain through the winter, while in spring the Parula builds its nest in a swinging garland of Spanish moss. The Prothonotary seeks a secluded hollow near the water, and the Swainson's nest is all but invisible in the canebrakes.

As the Hermit Thrush flies northward in spring the Carolina Wren, the Cardinal, the Mockingbird, the Brown Thrasher joyously sing of nesting. The Wood Thrush, just arrived, adds its flutelike obbligato from the heights of a distant tree.

Whatever the season there are birds at the Merry Brick Yard, migrating birds in spring and fall, nesting birds in spring and summer, refugee birds from the cold north in winter.

Similarly, whatever the season, the plant life is arresting. In early March the swamp maples, silhouetted against the clear blue sky, dangle their red keys as a signal that the doors of spring are about to open. Soon thereafter the wild crabapple, the yellow jessamine, the honeysuckle scent the air, the trumpet vine and the marsh clematis twine their way upward to the trees, the false indigo and the scarlet buckeye brighten the pathways.

In fall the goldenrod complements the blaze of autumn leaves, the groundsel is heavy with fluffy white down, the cattails, standing tall, spill their silky seeds as light as foam into the shallow water.

In winter the deciduous trees, like etchings on the landscape, reveal where birds hid their summer nests. Along the water's edge, intermingled with evergreens, they cast picturesque reflections in the placid ponds.

And so the unofficial refuge at the Merry Brick Yard completes its annual cycle, a boon to nature and nature lovers alike even as the industrial plant is an invaluable asset to the economy of the Central Savannah River Area. Would that it were possible for more industrial plants to develop similar conservation adjuncts!

Backyard Birding

ANNIE RIVERS FAVER
Department Editor

Backyard Wood Ducks in Lumberton, N. C.

On April 9, 1966, J.L. Stephens wrote as follows:

Wood Ducks nesting in a metal box only 20 yards from my parlor window in Lumberton have furnished many interesting observations. Nesting of Wood Ducks near human habitation is not unusual, since the birds find in such places protection from their natural enemies. Such nesting, however, usually goes undetected, since dawn and dusk are the periods of greatest activity.

During the second week in February, a pair of Wood Ducks came each morning at daybreak and inspected the metal nest box of the type developed by the Zoology Department of the University of Illinois, at Urbana. The hen made frequent trips to the nest box, while the drake perched nearby on a limb of a large sweet gum tree. The box was 30 feet from the ground in a large beech tree and was located some 100 yards from Lumber River in a swamp clearing. Possession of the box was bitterly contested by a pair of Starlings and it seemed for a time that the Starlings would win.

All doubt of this was resolved, however, on April 1, when the hen duck led the way to the nest box and entered the box. The drake circled the tree and returned to his loafing place on the river. By April 15 it is believed that egg-laying was completed and incubation began.

For several years Wood Ducks have nested along the Lumber River behind my house, either in metal nest boxes or in natural cavities in cypress trees. Ducks using the durable nest boxes face many hazards: the Screech Owl is a strong competitor in the early spring; later, the flickers, squirrels and Starlings compete for the boxes. Along the river, vandals shoot the metal boxes and when they are full of holes the Wood Ducks will not use them. So the metal box, while long-lasting and almost predator proof, is not practical along much used waterways filled with human activity.

This is the first spring we have had a pair of nesting Wood Ducks under observation. The Wood Duck is one of nature's gems and its interesting nesting habits more than repay anyone who provides suitable nesting quarters.

An Unusual Robin: A Partial Albino

The partial albino Robin was first sighted near Charlotte, N.C., a few minutes before 5:00 PM on January 17, 1966. In the edge of the woods behind the house (Highway 29N and N.C. 85 By-pass), the bird was alone, searching among the leaves for food. It seemed quite tame. I was able to remain a few feet—five or six—away from the bird at all times. Bird was observed with 6X30 binoculars and notations made on paper for 15 minutes. Then the bird joined another Robin in the tree tops and both flew away.

(Continued on page 88)

SPRING BIRD COUNT — 1966	Individual Totals	COAST				COASTAL PLAIN					PIEDMONT								
		Morehead City, N.C. 24 April	Wilmington, N.C. 7 May	Charleston, S.C. 30 April	Hilton Head Island, S.C. 28 April	Beaufort Co., N.C. 8 May	Pamlico Co., N.C. 1 May	Rocky Mount, N.C. 4 May	Wayne Co., N.C. 30 April	Fayetteville, N.C. 2 May	Henderson, N.C. 7 May	Raleigh, N.C. 30 April	Chapel Hill, N.C. 1 May	Greensboro, N.C. 30 April	Winston-Salem, N.C. 1 May	Stanly Co., N.C. 7 May	Charlotte, N.C. 7 May	Greenville, S.C. 30 April	Anderson Co., S.C. 30 April
Common Loon	13	6								1	1			4		1			
Horned Grebe	2											1		1					
Pied-billed Grebe	22		2	3			1	1		1		6		1	7				
Brown Pelican	106			47	59														
Gannet	9	9																	
Double-cr. Cormorant	74	4	4	28	14	9	14							1					
Anhinga	10			5	5														
Great Blue Heron	56	5	9	13	11			2	1		1	3	2	1	2	6			*
Green Heron	91	5	17	21	8	3	6	5	2	3	1	3	3	9		2	2		1
Little Blue Heron	72	9	20	19	15	1		1	4					1		1			1
Cattle Egret	417	128	1	34	180	6	16	37	2	13									
Common Egret	274	59	22	30	155		1	2	1					4					
Snowy Egret	183	60	2	42	78			1											
Louisiana Heron	78	19	2	20	37														
Bl.-cr. Night Heron	29	21		2	2							1	2		1				
Yel.-cr. Night Heron	30	1	2	3	21									1	1		1		
Least Bittern	11		3	5								3							
American Bittern	6		2						*			2	*	1					1
Glossy Ibis	54	22	18	14															
White Ibis	185			118	67														
Canada Goose	16													3	13				
Mallard	73		1			1			2	4		30		13	20	1		1	
Black Duck	20	2						2						7	2				7
Gr.-winged Teal	2			2															
Bl.-winged Teal	77	24		26					*			10		17					*
American Widgeon	2													2					
Shoveler	5			1									2	2					*
Wood Duck	100	1	2	33	5		2	5	6	2		7	4	14	9	9	1		
Scaup (Sp.?)	128	8+		25	70							22+		3+					*
Ruddy Duck	13						10							2	1				

Hooded Merganser	3											3							
Common Merganser	2									1				1					
Red-breasted Merganser	7		1											5		1			
Turkey Vulture	176		1	11	81	3	2	17	3		6	2	27	7	7	6	1		2
Black Vulture	98			10	43	6		9	2		6	6	8			3	3		2
Swallow-tailed Kite	2		1	1															
Sharp-sh. Hawk	6											2	1			1			2
Cooper's Hawk	5											2		2	1				
Red-tailed Hawk	41	1	2	6	4			3	4	2		6	5	4	1	2	1		*
Red-shouldered Hawk	25			9	2			1	2		1	2	2	4	1				1
Broad-winged Hawk	15												5	3	3		1		3
Bald Eagle	1											1							
Marsh Hawk	10							4		1		3						1	1
Osprey	42	1	17	8			2		1				1	7	1	3			1
Sparrow Hawk	16									3		5		1	1	2	1		3
Bobwhite	1,023	18	80	37	70	31	16	41	24	55	19	40	85	181	97	114	58	5	52
Turkey	3			3															
King Rail	6		1		4							1							
Clapper Rail	72	37	15	12	8														
Virginia Rail	3		3																
Sora	5			2					1			2							
Black Rail	1													1					
Purple Gallinule	2		1	1															
Common Gallinule	52		21	31															
American Coot	71		2	40	3				2			10		10		3			1
American Oystercatcher	62	12	45	4	1														
Semipalmated Plover	173	3	143	27															
Wilson's Plover	60	32	27	1															
Killdeer	79		4		1			19	4	1		11	3	7		23	5		1
Bl.-bellied Plover	92	18	64	7	3														
Ruddy Turnstone	4	3	1																
American Woodcock	7											1		4		1	1		
Common Snipe	24	1							1			10	1	3		5			3
Whimbrel	56	1	21	34															
Spotted Sandpiper	83		3	6	6	2		3	1	2	1	10	9	15	7	10	2		6
Solitary Sandpiper	64		1		2	2			3	3	1	6	5	10	15	1	5		10
Willet	181	42	111	17	11														*
Greater Yellowlegs	103	77	11	6				1	7					1					
Lesser Yellowlegs	42	29	5					4	*					1	1				2
Purple Sandpiper	1	1																	
Pectoral Sandpiper	12	1	8											1	1				1
Least Sandpiper	72	46	5		3	2						6			4				6

SPRING BIRD COUNT — 1966	Individual Totals	COAST				COASTAL PLAIN					PIEDMONT								
		Morehead City, N.C. 24 April	Wilmington, N.C. 7 May	Charleston, S.C. 30 April	Hilton Head Island, S.C. 28 April	Beaufort Co., N.C. 8 May	Pamlico Co., N.C. 1 May	Rocky Mount, N.C. 4 May	Wayne Co., N.C. 30 April	Fayetteville, N.C. 2 May	Henderson, N.C. 7 May	Raleigh, N.C. 30 April	Chapel Hill, N.C. 1 May	Greensboro, N.C. 30 April	Winston-Salem, N.C. 1 May	Stanly Co., N.C. 7 May	Charlotte, N.C. 7 May	Greenville, S.C. 30 April	Anderson Co., S.C. 30 April
Dunlin	778	164	565	35	14														
Dowitcher (Sp.?)	167	79	84	4															
Semipalmated Sandpiper	210	45	158										2	3	2				
Sanderling	91	61	26	2	2														
Bl.-necked Stilt	6			6															
Herring Gull	574	400	101	10	30	1										30			2
Ring-billed Gull	1,500	700	201	62	73	38	27	2		4	12	166		129	2	74			10
Laughing Gull	1,102	800	135	46	16	7	98												
Bonaparte's Gull	11	1	4									1		5					*
Gull-billed Tern	32	19	8	5															
Forster's Tern	50			1	37	12													
Common Tern	125	120	4											1					
Least Tern	272	57	186	16	11		2												
Royal Tern	187	96	62	17	10		2												
Caspian Tern	16		15											1					
Black Skimmer	226	150	64	6	6														
Mourning Dove	1,582	35	62	45	54	14	18	61	40	112	10	231	135	251	95	79	255	15	70
Ground Dove	244				23	1													
Yellow-billed Cuckoo	70		3	20	9			2	2			4	7	11	6	3	1		2
Black-Billed Cuckoo	6												2	1	3				
Barn Owl	2																		2
Screech Owl	5		1										*	1					3
Great Horned Owl	12		1	2	2			2	1	2		1		1					
Barred Owl	24	2		6	1							2	3	7		1	1		1
Chuck-will's-widow	67	6	20	7	8		1	3	3	2				4		3	1		9
Whip-poor-will	51		1									1	6	26	1	11	3		2
Common Nighthawk	58		13	4	4	6	3	2	4	2		6		2	10	1		1	*
Chimney Swift	2,244	16	7	58	32	11	30	235	23	14	14	78	48	281	1,150	79	84	12	72
Ruby-throated Hummingbird	93	1	2	10	5			1	1	8	3	6	17	15	12	6	6		*
Belted Kingfisher	60	1	*	12	2	1		2	5	3	1	7	1	13	4	3	4		1

Yellow-shafted Flicker	478	23	24	28	1	7	14	22	3	22	2	56	43	101	55	25	21	2	29
Pileated Woodpecker	76	1	3	36	10	3	6	1	5				2	3	2	3	1		*
Red-bellied Woodpecker	437	7	12	33	54	2	2	6	12	14	3	40	79	98	26	14	31	1	3
Red-headed Woodpecker	190	5	61	8	1	9	6		7	9	9	14	8	23	15	2	2		11
Yellow-bellied Sapsucker	12	1		1						2		4			2	1			1
Hairy Woodpecker	64	3	3	3	12	1		1	1	2		2	12	5	6	7	4		2
Downy Woodpecker	196	1	4	15	5	1	1	5	2	17	3	27	28	38	19	8	13	1	8
Red-cockaded Woodpecker	6		2	4															
Eastern Kingbird	496	8	12	22	32	22	14	9	7	54	10	32	61	40	18	24	33	1	97
Gray Kingbird	1				1														
Great Cr. Flycatcher	438	1	28	67	53	20	17	4	8	28	3	12	20	73	22	29	36	2	15
Eastern Phoebe	112					2		4			3	12	15	20	16	21	9	1	9
Yellow-bellied Flycatcher	1														1				
Acadian Flycatcher	99	1	2	21		3	2		11	2	4	1		14	7	15	14		2
Least Flycatcher	21										1		17			1	2		
E. Wood Pewee	196	3	4	9	13	8	4	2	6	10	8	7	48	19	3	19	22	2	9
Horned Lark	45							16				11		5	1	4	4		4
Tree Swallow	975	3	25	367	250	1	12	7	23	2		94		187	1				3
Bank Swallow	61							1				10		49		1			
Rough-wg. Swallow	303	7	4	4		2	2	41	22	9	9	68	3	61	26	4	17		24
Barn Swallow	1,128	12	204	35		6	14	120	3	10	5	90	28	422	3	136	2	10	28
Cliff Swallow	133													105	3				25
Purple Martin	1,019	9	150	110	11	29	16	32	10	5	1	47	19	249	5	317	1		8
Blue Jay	1,581	34	88	65	41	29	7	37	15	86	19	175	158	321	200	101	98	8	99
Common Crow	702	12	58	23	41	3	5	20	12	61	16	51	58	154	78	52	38	4	16
Fish Crow	176	27	62	36	23	12	2					5					9		
Car. Chickadee	629	14	13	38	40	6	9	3	7	26	7	61	78	145	62	51	55	2	12
Tufted Titmouse	629		27	43	24	8	3	14	8	51	5	74	67	164	48	31	36	2	24
White-br. Nuthatch	78			1				5	*			7	28	22	8	3	4		
Red-br. Nuthatch	15							2				5	2	4	1		1		
Brown-hd. Nuthatch	147	6	5	17	2	2	1	3	2	16	2	13	20	36	4	3	14		1
Brown Creeper	3									1		1	1						
House Wren	76							1			7	4	7	16	17	16	8		
Bewick's Wren	1															1			
Carolina Wren	580	21	43	77	41	7	9	11	16	32	6	49	71	61	13	53	43	2	25
Long-billed Marsh Wren	27	9	1	10	2				1			4							
Short-billed Marsh Wren	2				2														
Mockingbird	1,926	54	119	54	120	21	28	29	24	85	60	172	186	333	163	178	162	2	136
Catbird	531	10	18	3	5	5	1	2	1	62	22	77	59	84	79	50	24	1	28
Brown Thrasher	698	22	33	20	38	6		14	8	60	19	58	61	122	49	85	45	2	56

SPRING BIRD COUNT — 1966	Individual Totals	COAST				COASTAL PLAIN					PIEDMONT								
		Morehead City, N.C. 24 April	Wilmington, N.C. 7 May	Charleston, S.C. 30 April	Hilton Head Island, S.C. 28 April	Beaufort Co., N.C. 8 May	Pamlico Co., N.C. 1 May	Rocky Mount, N.C. 4 May	Wayne Co., N.C. 30 April	Fayetteville, N.C. 2 May	Henderson, N.C. 7 May	Raleigh, N.C. 30 April	Chapel Hill, N.C. 1 May	Greensboro, N.C. 30 April	Winston-Salem, N.C. 1 May	Stanly Co., N.C. 7 May	Charlotte, N.C. 7 May	Greenville, S.C. 30 April	Anderson Co., S.C. 30 April
Robin	1,392		13	1		13	3	5	12	75	38	169	115	363	212	147	130	5	91
Wood Thrush	879		29	22		5	1	11	12	46	17	37	142	243	88	118	67	2	39
Hermit Thrush	15			2	2						3	4		4					
Swainson's Thrush	21											1	1	15	2		1		1
Gray-cheeked Thrush	9							1		2		1	*	1	4				
Veery	20							2		1		3	2	7	3		1		1
Eastern Bluebird	379	5		3	28	12		4	20	6	4	41	93	32	11	52	21	4	43
Bl.-gray Gnatcatcher	438	3	12	93	21	2	3	3	10	9	5	15	50	131	31	20	22		8
Golden-crowned Kinglet	1															1			
Ruby-crowned Kinglet	42			4	2					2		9	*	8	7	2	2	1	5
Water Pipit	2												2						
Cedar Waxwing	228	57								34	5	18	11	60	3	20	9		11
Loggerhead Shrike	271	3	13	8	27	6	1	21	8	17	13	24	11	36	5	35	31	3	9
Starling	3,584	137	302	13	19	101	127	350	40	100	71		89	846	450	178	261		500
White-eyed Vireo	444	28	17	155	50	6	18	6	11	8	9	20	30	42	3	11	15	2	13
Yellow-throated Vireo	138	1	3	22	12	4	1	1	4	5	2	3	14	46	1	11	6		2
Solitary Vireo	13			1								4	4	4					
Red-eyed Vireo	728	6	30	65	29	15	4	10	12	27	15	30	144	153	64	69	36	2	17
Philadelphia Vireo	*																		*
Warbling Vireo	2														2				
Bl.-and-wh. Warbler	83			2	3	3		2		11		20	22	14	3				3
Prothonotary Warbler	121	36	9	18	2	4		4	12	1		1	9	8		8			9
Swainson's Warbler	1			1															
Worm-eating Warbler	16		1									1	2	11		1			
Golden-winged Warbler	7											2	2	2	1				
Blue-winged Warbler	19											4	8	4	2			1	
Tennessee Warbler	2												2						
Parula Warbler	373	12	77	90	43	10	7	2	23	25	12	21	29	18		1	1	1	1
Yellow Warbler	109		1	7				1	*	3	2	20	8	27	19	6	9	2	4
Magnolia Warbler	24									14		4	2	3	1				

Cape May Warbler	38	---	---	---	---	---	---	---	---	---	---	---	2	7	5	2	11	1	10
Bl.-th. Blue Warbler	53	---	---	2	---	---	---	1	*	9	3	9	7	12	2	1	3	1	3
Myrtle Warbler	651	23	30	25	1	---	---	20	15	21	15	75	105	133	91	4	14	10	69
Bl.-th. Green Warbler	28	---	2	15	---	---	---	---	---	---	---	---	1	7	1	2	---	---	---
Cerulean Warbler	3	---	---	---	---	---	---	---	---	---	---	---	---	2	1	---	---	---	*
Blackburnian Warbler	6	---	---	1	---	---	---	---	---	---	---	---	*	3	1	---	---	---	1
Yellow-throated Warbler	183	---	28	44	20	3	4	3	12	3	10	6	24	13	6	7	---	---	---
Chestnut-sided Warbler	22	---	---	---	---	---	---	---	*	---	---	---	1	14	6	---	1	---	---
Bay-breasted Warbler	3	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---
Blackpoll Warbler	59	---	3	---	---	1	---	---	*	3	13	2	6	1	4	1	19	---	6
Pine Warbler	161	9	17	19	3	5	7	4	2	14	3	11	17	19	5	9	14	---	3
Prairie Warbler	369	83	21	27	2	15	15	2	13	2	10	22	51	64	1	8	15	2	16
Palm Warbler	10	---	---	---	2	---	---	1	---	---	---	5	*	1	---	---	---	1	*
Ovenbird	132	---	1	---	---	1	1	2	1	2	12	13	23	50	14	1	6	---	5
Northern Waterthrush	7	---	---	---	---	---	---	---	---	---	---	---	1	2	4	---	---	---	---
Louisiana Waterthrush	31	---	1	---	---	---	---	---	2	---	1	1	5	6	---	4	8	---	3
Kentucky Warbler	40	---	2	1	---	---	---	---	2	---	3	1	6	14	3	4	2	---	2
Yellowthroat	345	2	13	22	---	14	11	3	14	18	4	43	30	93	14	19	27	1	17
Yellow-breasted Chat	233	---	10	31	---	---	---	---	2	---	6	15	36	41	33	20	17	1	21
Hooded Warbler	215	---	19	77	---	6	5	4	8	4	2	9	22	39	4	2	11	---	3
Canada Warbler	8	---	---	---	---	---	---	---	---	---	---	---	*	5	3	---	---	---	---
American Redstart	256	---	6	1	---	---	---	1	14	12	21	16	70	69	23	2	15	---	6
House Sparrow	5,797	125	1,820	12	4	61	127	500	31	125	65	281	65	1,015	250	612	241	13	450
Bobolink	2,397	---	25	10	15	---	44	31	*	---	---	750	350	877	---	8	---	20	267
Eastern Meadowlark	1,264	29	12	31	18	14	18	45	15	38	5	188	90	250	73	127	95	14	202
Red-winged Blackbird	2,726	74	227	180	217	41	130	122	36	38	26	190	150	397	61	174	59	4	600
Orchard Oriole	257	16	31	50	32	7	11	1	6	6	5	12	6	22	6	16	16	---	14
Baltimore Oriole	32	---	7	---	---	---	---	5	*	2	---	1	7	2	4	2	---	---	2
Rusty Blackbird	47	---	---	---	---	---	2	---	---	---	3	16	6	9	---	5	5	---	1
Brewer's Blackbird	1	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---
Boat-tailed Grackle	271	48	74	79	70	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Common Grackle	2,687	176	110	41	25	111	63	250	25	125	34	67	86	442	380	297	200	5	250
Brown-headed Cowbird	329	13	24	1	8	3	8	14	---	13	5	46	50	36	32	26	30	---	20
Scarlet Tanager	143	---	1	---	---	---	---	8	---	*	5	2	22	67	15	6	2	1	14
Summer Tanager	418	2	20	71	54	12	2	10	7	18	7	33	55	47	11	38	19	2	10
Cardinal	2,437	31	102	97	202	51	25	21	42	150	36	204	305	483	193	201	190	---	104
Rose-breasted Grosbeak	80	---	---	---	---	---	---	3	---	---	---	2	4	32	28	*	3	3	5
Blue Grosbeak	140	---	12	---	---	2	1	3	2	12	---	7	6	10	7	17	18	4	39
Indigo Bunting	450	1	53	43	4	19	6	2	3	50	13	10	43	34	36	31	41	3	58
Painted Bunting	144	1	32	42	69	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SPRING BIRD COUNT — 1966		COAST				COASTAL PLAIN					PIEDMONT								
	Individual Totals	Morehead City, N.C. 24 April	Wilmington, N.C. 7 May	Charleston, S.C. 30 April	Hilton Head Island, S.C. 28 April	Beaufort Co., N.C. 8 May	Pamlico Co., N.C. 1 May	Rocky Mount, N.C. 4 May	Wayne Co., N.C. 30 April	Fayetteville, N.C. 2 May	Henderson, N.C. 7 May	Raleigh, N.C. 30 April	Chapel Hill, N.C. 1 May	Greensboro, N.C. 30 April	Winston-Salem, N.C. 1 May	Stanly Co., N.C. 7 May	Charlotte, N.C. 7 May	Greenville, S.C. 30 April	Anderson Co., S.C. 30 April
Evening Grosbeak	340	—	*	—	—	—	—	5	20	37	—	97	33	130	4	3	3	—	8
Purple Finch	121	—	—	—	—	—	—	—	—	—	—	—	*	109	12	—	—	—	—
Common Redpoll	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Pine Siskin	205	—	—	—	—	—	—	—	—	8	—	34	99	35	13	3	3	—	10
American Goldfinch	1,390	—	20	—	—	3	—	5	—	30	4	24	127	906	173	46	29	8	15
Rufous-sided Towhee	1,051	76	66	31	22	17	11	31	9	49	10	112	81	246	84	47	92	3	64
Savannah Sparrow	117	26	3	20	4	—	14	—	*	3	—	36	6	4	1	—	—	—	*
Grasshopper Sparrow	48	—	—	—	—	—	—	—	—	—	—	10	1	20	—	4	2	2	9
Sharp-tailed Sparrow	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Seaside Sparrow	94	89	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vesper Sparrow	15	—	—	—	—	—	—	—	—	—	—	14	—	—	—	—	—	—	1
Bachman's Sparrow	7	1	2	1	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—
Slate-colored Junco	20	—	—	—	—	—	—	—	—	—	—	17	*	1	—	1	1	—	—
Chipping Sparrow	659	5	1	10	3	11	3	4	4	8	6	50	108	214	82	64	52	2	32
Field Sparrow	390	—	3	3	2	1	3	2	2	7	4	97	43	81	11	50	39	11	31
White-crowned Sparrow	6	—	—	—	—	—	—	—	1	—	—	—	—	2	1	*	—	—	2
White-throated Sparrow	801	13	7	26	4	—	2	4	10	45	—	168	70	283	102	17	14	7	29
Fox Sparrow	8	—	—	—	—	—	—	—	—	5	—	2	—	1	—	—	—	—	—
Swamp Sparrow	37	—	1	8	—	—	2	—	2	—	—	15	—	8	1	—	—	—	*
Song Sparrow	115	4	1	3	—	—	—	—	—	4	—	23	3	42	17	—	12	3	3
Total Number Species	231	110	141	140	107	78	73	100	90	95	78	141	118	164	127	116	103	56	115
Total Number Individuals	66,153	4,888	6,749	3,819	3,149	951	1,106	2,410	830	2,152	828	5,194	4,580	12,562	5,164	4,302	3,128	223	4,118

*Seen in count area during count period but not on count day.

+Lesser Scaup

SPRING BIRD COUNT — 1966

ELOISE F. POTTER

The 1966 Spring Bird Count was conducted at 18 localities in North and South Carolina with 245 participants finding 231 species. To accomplish this, the 101 parties traveled approximately 3,000 party-miles, spent 826 party-hours in the field, and tallied 66,153 individual birds. All counts were taken between 24 April and 8 May. Weather conditions were generally pleasant, but quite a few observers were caught in showers the weekend of 30 April and 1 May. Although the 1966 coverage was not as extensive as in 1965 when there were 24 count areas, it was slightly better than average for recent years. The only real weakness of the present census is the absence of reports from upper piedmont and mountain areas.

Greensboro had an unusually successful spring census. Thirty-two observers tallied 12,562 individual birds of 164 species, including 30 species of warblers, a Black Rail, a Brewer's Blackbird, and a Common Redpoll. Trailing Greensboro were Raleigh and Wilmington with 141 species and Charleston with 140. The coastal warbler migration had nearly ended prior to the count period, and very few individuals of non-breeding species were recorded east of the fall line.

Of particular interest are the 25 Cliff Swallows found at Anderson, S.C. These birds were part of the breeding colony at Hartwell Dam (*Chat*, 29:95-97, 1965). Some other interesting sightings were the Swallow-tailed Kite at Wilmington; Gray Kingbird, Hilton Head Island; Yellow-bellied Flycatcher, Winston-Salem; Bewick's Wren, Stanly County; Swainson's Warbler, Charleston; and two Tennessee Warblers, Chapel Hill. Details of these and other records worthy of comment will be found in the compilers' local summary paragraphs.

EASTERN BLUEBIRD.—As Rhett Chamberlain pointed out in his article on the Eastern Bluebird (*Chat*, 29:64-65, 1965), the wintering bluebirds have migrated before the Spring Count dates. Chamberlain noted the sharp decline in the number of bluebirds, both breeding and wintering, as shown by the 1960 census figures and the subsequent slow recovery of the species. During the heavy snowfall of late January 1966 bird watchers began asking each other, "What will this do to the bluebirds?" The 1966 Spring Count figures indicate a moderate decline in the breeding population throughout the Carolinas. Typical of piedmont North Carolina is Greensboro, which tallied 21 bluebirds in 1960, 44 last year, and 32 this year. However, a substantial gain was noted at Chapel Hill, where observers found 93 bluebirds, 15 more than last year and nearly triple the 1960 figure of 33. The effectiveness of bluebird nest-box projects has been demonstrated at Chapel Hill and elsewhere. We have only ourselves to blame for the decline of the Eastern Bluebird if we do not erect nesting boxes in our own communities.

Anderson County, S.C. (all points within a 15-mile diameter circle centered at Anderson Airport).—30 April; 4:30 AM to 7:15 PM. Cloudy to partly cloudy with showers; temp. 62 F to 77 F; wind variable, W to SW, 0-10 mph. Twelve observers in 5 parties, 1 individual working own yard. Total party-hours 43 (34 by car, 9 on foot); total party-miles, 206 (189 by car, 17 on foot). **Total species, 115; total individuals, 4,118.** The **Little Blue Heron**, a mature individual, is most unusual for this area in spring; it was one of three seen during count period. The **Black Ducks** were very late. The **Cliff Swallows** were obviously part of the nesting colony at the dam, as they were seen just inside the area near the dam. The **Willet** was seen several days prior to the count in the same locality where one was seen several years ago. The male **Cerulean Warbler** was in the compiler's yard three days before the count.—J.D. Copeland, Mrs. Rufus Fant, Gaston Gage, Ruth Gage, Joan Geiger, Roland Geiger, Howard Spencer, Marcia Spencer, Adair

Tedards (compiler), Connor Tedards, Elizabeth Thurber, William Thurber, Caroline Watson.

Beaufort County, N.C. (all points within a 15-mile diameter circle centered where Upper Goose Creek enters Pamlico River in central Beaufort County).—8 May; 5:45 AM to 6:30 PM. Fair to partly cloudy; temp. 54 F to 82 F; wind S, calm all day. Three observers in 1 party. Total party-hours, 12 (8 by car, 4 on foot); total party-miles, 85 (80 by car, 5 on foot). **Total species, 78; total individuals, 951.**—Jeff Cowell, Geraldine Cox (compiler), Marvin Turnage.

Chapel Hill, N. C. (all points within a 15-mile diameter circle centered at intersection of Columbia and Franklin Streets).—1 May; 5:00 AM to 6:00 PM. Fair; temp. 64 F to 86 F; wind light. Thirty-four observers in 12 parties plus 6 individuals working own yards. Total party-hours, 63 (12 by car, 51 on foot); total party-miles, 126 (95 by car, 31 on foot). **Total species, 118; total individuals, 4,580.** This was a record spring count for our area both in species and numbers. Most unusual were 2 **American Pipits** seen in a plowed field at Mason Farm.—Robin Andrews, David Barnes, Dale and Alma Beers, Charles and Helen Blake, Carolyn Brooks, Louise Crumpacker, Fairman Cumming, John Filley, Ashby and Susan Fristoe, Robert Geist, Claude George, Francis and Jean Harper, Fred Hinton, Alexander Hull, Logan and Elnia Irvin, Bee Lemen, Stella Lyons, Johnnie Payne, Jo Peeler, Robert and Elizabeth Powell, Wiley Sanders, Robert and Mildred Sharpe, Jean Stewart, Wilma Stuart, M.L. Taliaferro, Robert and Elizabeth Teulings (compilers), Adelaide Walters, Fred and Josephine Weedon, Edmund Welch, James and Rebecca Whicker.

Charleston, S.C. (all points within a 15-mile diameter circle centered 14 miles NE of Mt. Pleasant and ½ mile E of US Hwy 17).—30 April; 6:30 AM to 5:30 PM. Rain or cloudy in morning, clear in afternoon; temp. 66 F to 78 F; wind variable, 5-15 mph. Fifteen observers in 5 parties. Total party-hours, 50.5 (9.75 by car, .75 by boat, 40 on foot); total party-miles, 195 (149 by car, 4 by boat, 42 on foot). **Total species, 140; total individuals, 3,819.** Uncommon, but not really unusual are Swallow-tailed Kite, and Swainson's, Blackburnian and Kentucky Warblers. Several hundred "peeps" were too distant for positive identification.—Roy Baker, Francis Barrington, Louise Barrington, Ted Beckett, Edwin Blitch, David Chamberlain, E.B. Chamberlain, Teague Coleman, Wilhelmina Coleman, Robert Clem, E.C. Clyde, J.H. Dick, John Metcalf, Ted Metcalf, Dory Smith.

Charlotte, N.C. (all points within a 15-mile diameter circle centered at intersection of Hwy 21 and Woodlawn Avenue).—7 May; 6:00 AM to 7:00 PM. Partly cloudy; temp. 59 F to 81 F; wind variable, ENE to SE, 6-19 knots. Thirteen observers in 6 parties, 4 individuals working own yards. Total party-hours, 34 (9 by car, 25 on foot); total party-miles, 218 (198 by car, 20 on foot). **Total species, 103; total individuals, 3,128. Least Flycatchers** (JPH) were seen and heard singing. **Fish Crows** (JPH, DW, CLM) were at city dump and were heard calling. The Slate-colored Junco was crippled.—Mrs. M.J. Barber, Mrs. W.G. Cobey (compiler), Mr. and Mrs. A.H. Dykema, Bobby Garrett, Elizabeth Goolsby, Mrs. P.H. Halberstadt, J.P. Hamilton, Mrs. B.A. Hawley, Anna B. Jewell, Mrs. A.A. Kittinger, Mrs. Clinton McKay, C.L. Moore, Mrs. E.J. Presser, Mrs. Richard Terman, Ruth Whyte, David Wright.

Fayetteville, Cumberland County, N.C. (all points within a 15-mile diameter circle centered at intersection of Robeson Street and Village Drive).—2 May; 6:00 AM to 6:00 PM. Light drizzle with intermittent showers; temp. 54 F to 70 F; wind SW at 8 mph, changing to NE with gusts to 23 mph. Ten observers in 5 parties, 12 individuals working own yards. Total party-hours, 63 (35 by car, 3 on foot); total party-miles, 181 (177 by car, 4 on foot). **Total species, 95; total individuals, 2,152.** Neither the **Common Merganser** nor the **Common Loon** had been recorded previously in Cumberland County.—Mrs. George Allee, Derb Carter, Joan Courtney, Frances Currie, Sue Godfrey, Margaret Haigh, C.T. Haigh Jr., Doris Hauser, May Catherine Huske, Patty Hutaff, Howard Kyle, Asheton Lilly, Helen McGeachy, Frances Rankin, Henry Rankin, Evelyn Rhodes, Winship Shaw (compiler), Kitty Stewman, Betty Whiddon, Sudie Whitfield, Byron Williams, Lucille Williams.

Greensboro, N.C. (all points within a 15-mile diameter circle centered ½ mile SW of WBIG transmitter).—30 April; 5:30 AM to 7:30 PM. Misty, overcast in morning, sunny later; wind calm. Thirty-two observers in 11 parties. Total party-hours, 112.5 (40 by car, 72.5 on foot); total party-miles, 507 (457 by car, 50 on foot). **Total species, 164; total individuals, 12,562.**—John Austin, Rose Avery, Don Burney, John Carr, Mary Cary, Madeline Cason, Inez Coldwell, Eve Craft, Larry Crawford, G.W. Daniels, Mrs. G.W. Daniels, Charlotte DuBois, Howard Groover, Sidney Holmes, Mrs. Clarence Knight, Robert Lasley, Lena Marshburn, Jean McCoy, Ida Mitchell, Elizabeth Ogburn, Mrs. D. Parsons, Penny Parsons, Mrs. George Perrett, Etta Schiffman, Virginia Seawell, A.D. Shaftesbury, Ruth Sikes, G.A. Smith (compiler), Mrs. W.F. Smyre, Tom Street, Mrs. C.R. Surratt, Daphne Weisner.

Greenville, S.C. (all points within a 15-mile diameter circle centered at intersection of Hwy 291 and 29).—30 April; 7:30 AM to 7:00 PM. Cloudy and mild with occasional showers; wind 5 mph. Two observers in 1 party. Total party-hours, 8.5 (4.5 by car, 4 on foot). **Total species, 56; total individuals, 223.**—Rosa Lee Hart (compiler), May Puett.

Henderson, Vance County, N.C. (all points within a 15-mile diameter circle centered at Henderson).—7 May; 7:00 AM to 3:30 PM. Fair; temp. 56 F to 76 F; wind SW. Twelve observers in 8 parties, 4 individuals working own yards. Total party-hours, 8 (3 by car, 5 on foot); total party-miles, 43 (33 by car, 10 on foot). **Total species, 78; total individuals, 828.**—Neita Allen, Mrs. A.W. Bachman, Sarah Boyd, Annie Gray Burroughs, Mary Frances Chavasse, Betty Davis, Beryle Flannagan, Mariel Gary, May Hunter (compiler), Garnette Myers, Mike Stewart, Paul Stewart (Oxford, N.C.).

Hilton Head Island, S.C. (all points within a 15-mile diameter circle centered on Hilton Head Post Office).—28 April; 5:00 AM to 7:00 PM. Sunny; temp. 68 F to 84 F. Fifteen observers in 8 parties. Total party-hours, 58 (24 by car, 28 on foot); total party-miles, 101 (75 by car, 26 on foot). **Total species, 107; total individuals, 3,149. King Rails** (NB) were heard calling and had been seen previously at same location. The **Gray Kingbird** (AG) was also seen several days previously. **Short-billed Marsh Wrens** (NB) were seen clearly at 10 feet and heard singing.—Mr. and Mrs. W.H. Branch, Nancy Butler (compiler), Violet Duane, Aden Gokay, Mrs. Fred Hack, Mr. and Mrs. David Harrall, Mrs. Alva Hines, Mr. and Mrs. Henry Lawrence, Caroline Newhall, Mr. and Mrs. C.S. Sergeant, Alice Woodring.

Morehead City, N.C. (all points within a 15-mile diameter circle centered at Crab Point Intersection).—24 April; 5:00 AM to 6:30 PM. Clear, warm, and windy; temp. 63 F to 78 F; wind SW, 10-30 mph. Three observers in 2 parties. Total party-hours, 25 (14 by car, 1 by boat, 10 on foot); total party-miles, 120 (104 by car, 1 by boat, 15 on foot). **Total species, 110; total individuals, 4,888.**—John Fussell II, John Fussell III (compiler), Tommy Wade.

Pamlico County, N.C. (all points within a 15-mile diameter circle centered in Florence at the intersection of roads 1324 and 1329).—1 May; 5:00 AM to 7:30 PM. Fair to cloudy, intermittent showers; temp. 64 F to 84 F; wind S to SW, 0-20 mph, mostly windy. Four observers in 1 party. Total party-hours, 14 (10 by car, 4 on foot); total party-miles, 76 (72 by car, 4 on foot). **Total species, 73; total individuals, 1,106.**—Jeff Cowell, Geraldine Cox (compiler), Ronnie Hill, Ted Tyndall.

Raleigh, N.C. (all points within a 15-mile diameter circle centered at State Capitol).—30 April, 6:00 AM to 7:00 PM. Heavy clouds, overcast all day, ground wet; temp. 50 F to 75 F; wind calm all day. Thirty-four observers in 13 parties. Total party-hours, 92.5 (20.5 by car, 72 on foot); total party miles, 200 (147 by car, 53 on foot). **Total species, 141; total individuals, 5,194.**—Mrs. F.H. Brant, Mike Browne, Mrs. W.J. Buffaloe, Mrs. J. Burnette, Mrs. J.W. Chalfant, Donald Cilley, Mrs. Wm. Clary, John Coffey, Nelson Coffey., H.T. Davis, Mrs. Ann Davis, Mrs. Floyd Davis, Mrs. L.C. Dillard, Mrs. David Fuller, Mrs. Z. B. Greene Jr., J.F. Greene, Will Hon, Mark Kelly, Mrs. W.E. Kelley, Mrs. Calvin Koonce, John L. Lamson, Mrs. J.L. Lamson, Harry LeGrand, Dale Lewis, Mrs. Blaine Madison, Miss Edna O. Miller, Miss Mabel Miller, Mrs. John Rhodes, Mrs. A.J. Skaale, Mark Thompson, Mrs. R.A. Turbiville, Mrs. Wm. L. Wilson, Mrs. D.L. Wray, D.L. Wray (compiler).

Rocky Mount, N.C. (all points within a 15-mile diameter circle centered at Rocky Mount).—4 May; 7:30 AM to 6:30 PM. Fair; temp 65 F to 78 F; wind SW, 5-10 mph. Five observers in 2 parties, 2 individuals working own yards. Total party-hours, 22 (16 by car, 6 on foot); total party-miles, 64 (48 by car, 16 on foot). **Total Species, 100; total individuals, 2,410.** The **Snowy Egret** was further inland than one would expect it to be.—Joyce Bennett, Stephen Howell, Carr Speight, John L. Thompson (compiler), Mary Louise Warner.

Stanly County, N.C. (all points within a 15-mile diameter circle centered about 2 miles NW of Badin).—7 May; 3:00 AM to 7:00 PM. Fair; temp. 58 F to 85 F; wind NE, 12-15 mph, calm in afternoon. Fifteen observers in 6 parties, 17 individuals working own yards. Total party-hours, 75 (9 by car, 5 by boat, 61 on foot); total party-miles, 182 (121 by car, 29 by boat, 32 on foot). **Total species, 116; total individuals 4,302. Bewick's Wren** (MG) was seen near City Lake at close range and thoroughly studied.—Erin and Roy Blalock, Allen Culp, George Culp, Vera and Barrett Crook, Ervin Eudy, Sylvia Falk, Joe Ferebee, Mattie and Rudy Gerig, Cleary Haithcock, Lectie Harwood, Louise Hammill, Gladys and Sherman Hill, Nelle and Claude Hinson, Myrtle Isenhour, Donald Maner, Barbara Maner, Vera and Gladys Mason, Doris and James Mauney, Paine Misenheimer, Harold Morris, Helen Mount, Spencer Plyler, Eddie Smith, Addie Thompson, John Whitlock, Vivian Whitlock (compiler), Bennie Winget.

Wayne County, N.C. (all points within a 15-mile diameter circle centered at Indian Springs to include Seven Springs, Mt. Olive, Cliffs of Neuse State Park, Walnut Creek Lake).—30 April; 5:30 AM to 6:00 PM. Cloudy in morning, fair in afternoon; temp. 50 F to 70 F; wind E, 5-10 mph. Two observers in 1 party. Total party-hours, 12 (6 by car, 6 on foot); total party-miles, 110 (104 by car, 6 on foot). **Total species, 90; total individuals, 830.** The **Sora** and **Long-billed Marsh Wren** are seldom seen here. The **White Crowned Sparrow** had been at Margaret Walker's feeder for several days.—R.H. Siler (compiler), Margaret Walker.

Wilmington, N.C. (all points within a 15-mile diameter circle centered at Myrtle Grove Junction).—7 May; 4:00 AM to 6:30 PM. Overcast in morning, clear in afternoon; temp. 61 F to 82 F; wind 8.2 mph, S shifting to W. Thirteen observers in 6 parties, 2 individuals working own yards. Total party-hours, 62.5 (30.5 by car, 32 on foot); total party-miles, 298 (265 by car, 33 on foot). **Total species, 141; total individuals, 6,749.—Adult Swallow-tailed Kite** (JP et al.) was observed for 15 minutes in flight over Masonboro Sound.—Cecil Appleberry, Edna Appleberry, Ann Dermid, Dot Earle, Dave Emery, Betty Everson, Paul Grooms, Jim Hunt, Harry Latimer III, Greg Massey, Linda Massey, John Meshaw, Frances Needham, Jim Parnell, Mary Urich.

Winston-Salem, Forsyth County, N.C. (all points within a 15-mile diameter circle centered at intersection of Silas Creek Parkway and Interstate 40).—1 May; 5:00 AM to 6:30 PM. Cloudy, clearing to sunny; temp. 56 F to 79 F; wind southerly, 5-10 mph. Twenty-one observers in 8 parties, 3 individuals working own yards. Total party-hours, 71 (12 by car, 59 on foot); total party-miles, 190 (165 by car, 25 on foot). **Total species, 127; total individuals, 5,164. Yellow-bellied Flycatcher** (CRH) was singing. **Pectoral Sandpiper** (TS, DS, WI) was seen through telescope at close range. Blue and Golden-winged Warblers appear to be uncommon but regular migrants in area. Canada Geese included six goslings. The total of Rose-breasted Grosbeaks was unsually high.—Linda Arnold, Jess Craven, Charles Frost, Gardner Gidley, Gary Gidley, Margaret Gidley, Fred Hill, Page Hill, C. Royce Hough (compiler), Royce Hough Jr., Wayne Irvin, Barbara Page, Doris Simpson, Thomas Simpson, Edith Spinks, John Spinks, Harry Snavely, Ramona Snavely, Arameta Warren, Roger Warren, Robert Witherington.

NEWS AND COMMENTS

This is not an apology for the late mailing of the present issue of *Chat,* but I do feel that CBC members deserve an explanation. Both your editor and the new editor of the General Field Notes, James F. Parnell, moved into new homes during the final stages of preparing the September *Chat* for the press. Looking back on the confusion of moving, I wonder that there is any September issue at all!

In addition to moving, Dr. Parnell attended the annual meeting of the American Ornithologists' Union and presented a paper based on his research involving warbler migration. Dr. Thomas L. Quay, of the Zoology Department at North Carolina State University at Raleigh, presented a paper on wintering Baltimore Orioles at the same meeting.

Nest-Record Card Reminder

Participants in the North American Nest-Record Card Program sponsored by Cornell Laboratory of Ornithology are reminded that it is time to complete the cards for the 1966 nesting season and send them to the Regional Center. Observers in North and South Carolina should send cards to Dr. James F. Parnell, Department of Biology, Wilmington College, Wilmington, N.C. In 1965 over 25,000 completed cards were returned, and the 1966 total is expected to be even better. Papers using data from the nest-record cards were presented at the Wilson Society meeting at Pennsylvania State University, and it is hoped that use of the program by research workers will increase.

Bald Eagle Painting Reproduced

A color reproduction of a Bald Eagle painting, mounted in a folder describing the precarious situation of the bird that is the National Emblem, has just been produced by the Department of the Interior. The 8½ by 11¼-inch illustration is mounted on heavy paper for framing. The original painting is by Bob Hines, wildlife artist with the Department's Bureau of Sport Fisheries and Wildlife in Washington, D.C. It shows an adult eagle perched on a dead tree and silhouetted against an overcast sky above a rolling countryside. The eagle's wings are spread and its beak is open in a defiant scream. Reproductions of the painting, in the folder, are available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, at 50 cents each.

(Continued from page 75)

Observed same bird again January 18 at 4:40 PM in open field. It was accompanied by 10 normal Robins and a few Starlings. Was able to observe and track bird for 5 minutes with aid of binoculars. Bird stayed a good distance away (30 to several hundred feet) and his behavior was governed by the actions of the rest of the flock. He flew when the rest did and would land approximately with the others.

On January 19, 1966 a large flock of Robins landed in the open field about 10:00 AM. They came to drink at an ice-covered puddle of water. I got a fleeting glimpse at the albino when it flew with the others to the deep woods as I approached.

12 NOON. Flock landed again in open field near the water. I counted 39 Robins, 1 Yellow-shafted Flicker, 1 Eastern Meadowlark, 4 Starlings—no white Robin.

1 PM. Flock landed again in open field about 500 feet away from my home. Sighted white Robin with binoculars, eating away from the other Robins. I was able to approach quite close (8 feet or so) to bird. Noticed for the first time the very dark striping under throat. Bird had a tendency to feed alone, but near the larger flock of birds.

2 PM. Observed the albino again for a few minutes, feeding with the flock near the edge of the woods. It did not seem to wander off by itself, but stayed with the others.

2:38 PM. Birds again near the woods. Tried to concentrate on the feet of the albino bird. They appeared to be off-white with a tinge of yellow and reddish brown.

4:50 PM. Alone in the woods, I was able to get within 10 feet of the bird. He was not afraid and one time he stood like a statue for 6 minutes. I was able to get a lot of detail on his eyes and wing features. He flew away at 5 PM. At 5:15 PM, he came back to the yard alone. I was able to get within 3 feet of him. He did not even attempt to fly as I chased about wildly trying to run my cats from the scene. After all the commotion I was still able to approach the bird at close range and make the sketches. He gave his robin-chirp and flew off to the east, across Highway 29N at 5:22 PM.

January 20. No sign of flock this morning.

2:30 PM. Spotted flock for the first time this day at the water puddle in the open field. Counted 32 Robins (white one was with them) and several Starlings. Before I could get my coat on, (weather was quite cold and windy) the birds left.

3:15 PM. Birds again were at the "pond." White bird was taking a bath. All flew to the woods as I approached. White Robin came to my yard (wood's edge) alone at 5:09 PM. to feed. A Mockingbird which feeds regularly in the yard chased the Robin away. He did not return that afternoon.

January 21. No sign of birds all day.

January 22. Weather very cold and icy.

10:18 AM. Flock landed in woods behind house. White bird with them but feeding to itself. Appeared to be very jumpy and flighty. Would chase away other Robins and was often seen rising off the ground, wings outspread and beak to beak with another Robin. All observations made from kitchen window with binoculars. Finished notations on markings. At 11:13 AM I noticed a female in the flock that had a whiter breast and ashen-gray back. Very little reddish-brown markings. Was easy to spot from other females in flock.

12 NOON. All birds quiet. Seemed to go into roosting position to rest. This lasted about 10 minutes, then they went back to feeding. Although I had nuts, cracker crumbs, bread, raisins, suet and bird seed scattered, for the most part, the Robins preferred to rummage in the leaves for food. The Robins left at 1:09 PM.

January 23. Birds stayed at the wood's edge all day. This was the last day the flock of Robins has been to the yard. I have not seen them since.—MRS. JOHN S. DAVIS JR., Charlotte, N.C.

General Field Notes

James F. Parnell, *Department Editor*
Wilmington College, Wilmington, North Carolina

Cattle Egrets in Upper Richland County, South Carolina.—On 9 May 1966, Mrs. Overing and I counted 18 Cattle Egrets *(Bubulcus ibis)* in a pasture with a herd of cattle at the Loman Home for the Aged at White Rock, in upper Richland County, South Carolina. We know of no previously recorded sightings of the Cattle Egret in this part of South Carolina.

J. Earl Cromer, who is in charge of the cattle, said that several egrets had been in the fields for "about four weeks" prior to 9 May, and that two or three egrets appeared in the pasture a few times during the summer of 1965, usually immediately after heavy rains. He said that when the egrets first arrived they excited the cattle, and that the cows would lower their heads and charge the egrets, but soon they began to feed together harmoniously, and have continued to do so.

We saw one cow wander from the herd with eight of the egrets accompanying her in jumps and short flights. Mr. Cromer said that this was not an unusual occurrence, and that perhaps the cow left the herd deliberately, knowing that the egrets would concentrate on the insects attacking her.

The 18 egrets we counted remained in the pasture daily through 16 May, on which date the cattle were sprayed, and the pastures also, to eradicate a weed which was taking over the fields. No egrets appeared on 17 May, and as of 1 June none has returned.—Robert Overing, *Route 2, Chapin, South Carolina, 1 June 1966.*

Inland Sighting of Whimbrel.—On the morning of 4 August 1966 a Whimbrel *(Numenius phaeopus)* appeared on the front lawn of the Chemstrand Research Center, located in the Research Triangle Park, southeastern Durham County, North Carolina. A co-worker called my attention to the bird shortly after 8 o'clock. From a vantage point overlooking the lawn, I watched the bird probing the rain-soaked turf for food. A distinctly down-curved bill, dark legs, brownish back and brownish wings without white patches were the principal field marks. The decurved bill was long, but not exaggerated enough to be that of the very scarce Long-billed Curlew. The bird lingered until almost noon, creating considerable interest among curious onlookers at the Chemstrand laboratory.

Whimbrels are commonly seen along the coast in spring and early fall, but *The Chat* contains only two previous inland records for North Carolina, neither from as far west as Durham County. One bird was seen near Mount Olive on 12 August 1955 (**20**:17, 1956), and a flock of 15 was seen about 5 miles west of Goldsboro on 30 July 1956 (**20**:83, 1956). I think it is interesting that all of the inland sightings have occurred during the Whimbrels' southward migration.—Robert P. Teulings, *Route 2, Chapel Hill, North Carolina, 8 August 1966.*

Waterfowl Observations at Thagard's Lake, Moore County, North Carolina.—Thagard's Lake is located in the Whispering Pines development, about 6 miles north of Southern Pines, Moore County, North Carolina. Following heavy rains in August of 1964, the dam on this 260-acre lake broke. Coarse grasses grew abundantly in the wet lake bed until the early fall of 1965, when a new dam was completed. The lake had begun to fill as of 10 October 1965.

On 31 October Mary Keller Wintyen and I visited Thagard's Lake and found about 150 individual waterbirds of eight different species. The lake was full at this time. During the period between 31 October 1965 and 1 May 1966, we recorded 27 species of ducks and other waterfowl. Most of the time the birds remained among or near the grasses that remained above the water in the back part of the lake. All ducks had left Thagard's Lake as of 10 May.

Following is a list of 22 species of waterfowl along with their peak number at Thagard's Lake and the date of same: Common Loon, 1 on 28 April; Pied-billed Grebe, 3 on 31 October; Canada Goose, 5 on 31 October; Wood Duck, 2 on 27 April; Green-winged Teal, estimated 8 on 13 November; Blue-winged Teal, 25 to 30 on 27 and 28 April; Shoveler, 5 on 11 April; American Widgeon, estimated 18 on 11 April; Pintail, 9 on 23 January; Black Duck, 11 on 31 October; Gadwall, 2 on 27 and 28 April and 1 May; Mallard, 10 on 6 November; Canvasback, 2 on 19 and 26 February; Redhead, 3 on 19 and 26 February; Ring-necked Duck, estimated 300 on 27 March; Lesser Scaup, 19 on 11 April; Bufflehead, 1 on 23 January and 28 April; Common Goldeneye, 1 on 13, 20, and 26 November; Hooded Merganser, 1 on 26 November; Red-breasted Merganser, 3 on 27 and 28 April; Ruddy Duck, 4 on 27 April; and American Coot, 145+ on 20 November.

Some other interesting observations at Thagard's Lake include a Double-crested Cormorant on 27 and 28 April; 25 Ring-billed Gulls on 28 April, 9 on 1 May; 2 Bonaparte's Gulls on 28 April; 9 Common Terns on 28 April; and also a Black Tern on 28 April with 2 more on 10 May.—JAY CARTER, *Box 891, Southern Pines, North Carolina, 1 July 1966.*

Briefs for the Files

Compiled by JAMES F. PARNELL

(All dates 1966)

Red-Throated Loon, 1 seen at Raleigh, N.C. on 14 May, Will Hon and Paul Sykes.

Cory's Shearwater, 2 seen on 9 April from a ship about 19 miles south of Beaufort, N.C. by Paul Sykes.

Cattle Egret, reported very early at Seabrook Beach, S.C. on 14 February, Ephie Seabrook.

Yellow-crowned Night Heron, 1 at Reynolda Lake in Winston-Salem, N.C. 22 through 26 April, C. Royce Hough.

Little Blue Heron, 4 seen at Lake Hartwell near Anderson, S.C. on 16 April, were unusually far inland at this season, Adair Tedards.

Glossy Ibis, 1 found at Raleigh, N.C. on 26 April, Robert J. Hader.

Gadwalls, 9 remaining at Magnolia Gardens, Charleston Co., S.C. on 24 May, T.A. Beckett.

Mallards, 2 still present at Magnolia Gardens on 24 May, T.A. Beckett.

Ruddy Ducks, 4 remaining at Magnolia Gardens on 24 May, T.A. Beckett.

American Goldeneye, 1 remaining at North Wilkesboro, N.C. until 20 May, Wendell Smith.

Rough-legged Hawk, 3 seen at Anderson, S.C., 2 on 12 May and 1 on 15 May, Adair Tedards.

Bald Eagles, 2 seen during spring at Magnolia Gardens, Charleston Co., S.C. by T.A. Beckett, and 1 found at Raleigh, N.C. on 23 April by Mike Browne.

Golden Eagle, 1 late at Magnolia Gardens on 13 May, T.A. Beckett.

Purple Gallinule, a single individual seen in a roadside pond on Bodie Island, Dare Co., N.C., at the Cape Hatteras National Seashore during late May, Mrs. Floy Burford.

Upland Plover, 2 seen on 8 April, and 3 on 17 April, at Raleigh, N.C. by Mike Browne and reported to Robert Hader; 3 seen at North Wilkesboro, N.C. on 13 April, Wendell Smith.

White-rumped Sandpiper, 1 seen at Raleigh, N.C. with a flock of Least Sandpipers on 15 May, Mike Browne and Harry LeGrande.

Sanderling, 1 seen on 8 April, at Raleigh was unusual this far inland, Mike Browne. and Harry LeGrande.

Dunlin, a single individual at Tanglewood Park in Winston-Salem, N.C. on 15 May, C.R. Hough.

Red Phalaropes, 149 seen by Paul Sykes on 9 April south of Beaufort, N.C.; over 1000 seen by many members of the CBC about 6 miles off Wrightsville Beach, N.C. on 23 April.

Forster's Terns, 4 seen at Raleigh, N.C. on the late date of 14 May by Will Hon and Paul Sykes.

Ground Doves, a colony of about 15 pairs found on Bull's Island, S.C. on 20 May. Both eggs and young were present at the time of discovery by T.A. Beckett.

Traill's Flycatcher, again found singing at North Wilkesboro, N.C. on 18 May, Wendell Smith.

Horned Lark, 2 adults and 3 young found at the N.C. State University Faculty Club Golf Course in Raleigh on 1 May, Robert Hader.

Purple Martins, appeared early at Hilton Head Island, S.C. on 5 February, Caroline Newhall.

Gray-cheeked Thrush, 4 found on 1 May at Winston-Salem, N.C. by Gardner Gidley.

Water Pipit, 1 late at Raleigh, N.C. on 7 May, Robert Hader and Paul Sykes.

Warbling Vireos, 2 found at Winston-Salem, N.C. on 3 April, and 1 May, by C.R. Hough.

Swainson's Warbler, 2 seen singing at Kitty Hawk, N.C. in late May by Mrs. Floy Burford.

Nashville Warbler, 1 seen at Raleigh, N.C. on 3 May, Robert Hader.

Lawrence's Hybrid, 1 seen at North Wilkesboro, N.C. for first time by Wendell Smith on 26 May.

Evening Grosbeaks, last dates were: 30 April at Anderson, S.C., Adair Tedards; 11 May at Kershaw, S.C. by Ann Richadson; 1 May at Winston-Salem, N.C., Gardner Gidley; 1 May at Raleigh, N.C., Robert Hader; and 8 May at Wilmington, N.C., Harry Lattimer.

Pine Siskins, a single individual remained at Winston-Salem, N.C. until 13 May, Fred Hill.

White-crowned Sparrow, individuals found by Wendell Smith at North Wilkesboro, N.C. until 23 April; and 1 seen at Winston-Salem, N.C. on 1 May by Gardner Gidley.

Henslow's Sparrow, 1 seen at North Wilkesboro, N. C. by Wendell Smith on 28 April.

BOOK REVIEWS

Birds of North America, A Guide to Field Identification. Chandler S. Robbins, Bertel Bruun, and Herbert S. Zim. Illustrated by Arthur Singer. Golden Press, Inc., New York, N.Y. 1966. 340 p. $2.95.

It might seem at first sight that there is no room for another bird guide, but the present volume differs somewhat from all its predecessors in having all the birds of North America in one volume and virtually all except vagrants illustrated, in having a distribution map for practically every species, and in showing sonagrams for a considerable number of them. These distribution maps often include lines showing the point at which the birds normally arrive on a given date in the spring. They also distinguish the path of fall migration from the path of spring migration when there is such a distinction or else show that they are the same. The use of both the maps and the sonagrams is considered in the Introduction along with the more usual things one finds in an introduction to a bird guide. The reviewer's only misgiving relates to these sonagrams. Even with the explanation given, it is difficult, perhaps in some cases impossible, to deduce the timbre of the song or call from the sonagram. Perhaps the reviewer is needlessly critical here because his only appreciation of bird voices depends entirely on rhythm and timbre. On the whole, though, it is a volume which not only can be used in the field but will repay study, particularly of the distribution of our birds.—CHARLES H. BLAKE.

The Wood Duck in Massachusetts. David Grice and John P. Rogers. Massachusetts Division of Fisheries and Game. 1965. 96 p., illus. (No price given.)

This book comes close to being a monograph on the Wood Duck even though the emphasis is on population dynamics and management. It is shown that, on the experimental areas, breeding was limited by the number of nesting cavities. In Massachusetts trees containing suitable natural cavities are rather scarce. What is needed is an entrance 3 inches by 4 inches or somewhat larger and a cavity floor area of at least 80 square inches and average depth of 18 inches. Trees with employed cavities averaged 27 inches in breast high diameter. Further, there is a strong preference for a tree in a row or cluster of similarly sized trees. Territorialism is reduced to defense of the female by the male while she is away from the nest (usually feeding). This allows maximum use of the available cavities. A local population can be increased by providing properly designed and sited nest boxes.

The indicated annual mortality of fully adult Wood Ducks is 52 per cent and of first year birds 62 per cent. These figures are based on known hunting mortality. The ascertained survival of banded adult females (43 per cent) agrees so nearly with the above mortality as to suggest the surprising conclusion (by the reviewer) that hunting mortality almost entirely substitutes for natural mortality. Of course, this does not imply anything about natural mortality in the absence of hunting, which might be a much lower figure than 52 per cent per annum. Only about 10 per cent of males return to the natal area as opposed to nearly all surviving adult females. Even first year females return at a rate which may be as high as 76 per cent of those surviving. The difference between male and female return rates arises from the facts that the pair bond is formed on or near the wintering grounds and that the female leads the way to the breeding ground. The male, then, has no choice of a breeding ground.

It is evident that Wood Ducks do not spread far from their accustomed breeding areas and it is also known that, by artificial hatching of eggs, they can be introduced into suitable unoccupied areas. The reviewer feels that there is little hope of using farm ponds in the northern Piedmont, and doubtless elsewhere, as Wood Duck breeding areas. In general, they are too exposed, the banks are too steep and the ponds too deep for feeding, and they lack the necessary emergent vegetation in which the birds may take refuge.—CHARLES H. BLAKE.

Carolina Bird Club
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THE CHAT

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The Chat

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Vol. 30 December 1966 No. 4

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The Chat

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Editor ______________________________ Eloise F. Potter, Box 277, Zebulon, N.C.
General Field Notes ___ James F. Parnell, Wilmington College, Wilmington, N.C.
Backyard Birding __________________ Annie Rivers Faver, Rt. 2, Eastover, S.C.
Conservation _________ Gladys Buckner, 500 West Ave., North Augusta, S.C.
Editorial Board ______________________ Thomas L. Quay, Charles H. Blake
Contributing Editors ________________________ John K. Terres, Jack Dermid,
John Henry Dick, and Alexander Sprunt Jr.
Associate Editors _______________________ Thomas W. Simpson, Kay C. Sisson,
Robert P. Teulings, Ernest Cutts, and Adair Tedards

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OUR COVER—Nestling Brown Pelicans photographed by Jack Dermid.

DEVEAUX BANK—1964 AND 1965

THEODORE A. BECKETT III

Owned by the State of South Carolina and thoroughly posted by the South Carolina Wildlife Commission, Deveaux Bank is the nesting site for thousands of gulls, terns, pelicans, and skimmers. This large sand bar built up in the mouth of the North Edisto River off Seabrook Island lies about three-fourths of a mile out in the Atlantic Ocean, with its length running northwest and southeast. At low water the bank is over a mile long and about half a mile across at the widest point. The highest portions of the dunes rise about 12 feet above high water and form a horseshoe shape at the southeast end of the bank.

The vegetative growth on Deveaux is very sparse except on the high dunes. Even here, up until 1965, the growth seldom exceeded 3 feet during the active nesting season. Several forms of cord grass (*Spartina* sp.) along with sea oats (*Uniola paniculata*) form the dominant ground cover. Interspersed in clumps is found the salt myrtle (*Baccharis halimifolia*) with only a few small shrubs of wax myrtle (*Myrica cerifera*) present. A rather rank growth of Bermuda grass (*Capriola dactylon*) is found in large patches between the high dunes. In July 1964, following 23 inches of rain, water was at times 10 inches deep in portions of the Bermuda grass area. The 1965 season presented no standing water problem.

The history of Deveaux Bank as a breeding area for colonial nesting birds is rather brief. It is probable that the bank has built up and washed away over and over again. For example, the bank was not utilized by colonial nesters in the period of 1941 through 1944 following extensive hurricane damage to the dunes. Gradually rebuilt, the dunes reached a peak in height in 1964. During the 1965 nesting season there was rapid erosion of the southeast end of the bank, actually undercutting the high dunes. Although seldom mentioned in ornithological literature, Deveaux Bank has undoubtedly been inhabited by a large number of breeding birds for the last 20 years. Although some banding has been done during the past decade, only recently has it been carried out on a large scale. During the past four years over 15,000 Royal Terns and about 3,500 Brown Pelicans have been banded in this colony alone.

1964 AND 1965 NESTING SEASONS

During the 1964 and 1965 nesting seasons banders visited the Deveaux Bank bird colony about ten times each year between early April and late August. The "key" or bank nesters tend to hatch out their eggs periodically. In fact, banders must wait for new nestlings to become large enough to hold bands if a thorough banding job was done on the previous visit.

Table I summarizes the estimated number of pairs of breeding birds present on Deveaux Bank during the 1964 and 1965 seasons and the number of young birds banded. The following paragraphs contain comments on the nesting habits of the various species and some observations regarding population trends indicated by the banding studies.

WILLET AND AMERICAN OYSTERCATCHER

The first species to lay their eggs are the Willet and the American Oystercatcher. Neither species is of great importance in the present population make-up of Deveaux Bank. Both have precocious young, which are exceedingly hard to find once they begin to run around in the vegetation.

Willets nest in fairly thickly grassed areas of the higher dunes and will not flush from nests until nearly stepped upon. The nest is usually built in a clump of grass and contains four rather pointed eggs placed with small ends to the center. If the pointed ends are turned outward, the bird will quickly rearrange the eggs immediately upon returning to the nest.

TABLE I. *Comparison of the estimated number of breeding pairs of birds on Deveaux Bank and number of young birds banded during the 1964 and 1965 nesting seasons.*

Species	1964		1965	
	Breeding Pairs (estimated)	Young Banded	Breeding Pairs (estimated)	Young Banded
Brown Pelican *(Pelecanus occidentalis)*	2,000	1,344	600	1,120
Laughing Gull *(Larus atricilla)*	400	282	250	157
Gull-billed Tern *(Gelochelidon nilotica)*	40	10	15	0
Common Tern *(Sterna hirundo)*	14	1	15	0
Least Tern *(Sterna albifrons)*	30	0	15	0
Royal Tern *(Thalasseus maximus)*	14,000	5,679	6,000	2,094
Sandwich Tern *(Thalasseus sandvicensis)*	350	55	150	2
Black Skimmer *(Rynchops nigra)*	300	365	200	123
American Oystercatcher *(Haematopus palliatus)*	8	2	5	5
Wilson's Plover *(Charadrius wilsonia)*	2	0	1	0
Willet *(Catatrophorus semipalmatus)*	12	0	25	1
Red-winged Blackbird *(Agelaius phoeniceus)*	4	0	50	0

Oystercatchers prefer to nest in flat open sandy areas. Here the constant wind soon partially covers the exposed eggs, protecting them from the hot sun and predators. At the sight of man the oystercatcher quickly leaves the nest, flying around in circles whistling and trying to draw the intruder away from the nest site. A complete clutch of three eggs may sometimes be found by the second week in April, but more often a complete clutch has only two eggs.

BROWN PELICAN

On Deveaux Bank the Brown Pelican is the first species to start nest construction in any numbers. These nests may range in height from 4 inches to over 3 feet. One nest measured 39 inches in height. The early arrivals seem to build more elaborately, since at this time nesting material is more abundant and easier to obtain. The choice sites are always taken by the early arrivals. From these high spots on the beach front dunes the birds can always face the wind, ever ready for quick flight at the approach of an intruder. Nesting material consists mainly of large twigs broken from the wax myrtles, floating sticks, and grasses gathered in the surf, and rarely a few pieces brought from Seabrook Island. Since the nesting material is relatively long and large, it is usually carried lengthwise in the bill, at the tip if possible, but flimsy grasses are carried cross-wise in the bill. In former years when the colony numbered over 5,000 pairs of Brown Pelicans, the vegetation would be stripped and only stumps and roots left until the nest building season was over. Today obtaining nesting material is no longer a problem for the Brown Pelicans because of their greatly reduced numbers, an estimated 600 pairs in 1965.

Some Brown Pelicans breed when only two years old, but in all such cases observed, at least one of the pair was in adult plumage. Through trapping of breeders on the nest, it was found that three-year-old birds do have adult plumage. An attempt to check on second broods has been made by color banding, but to date there is no positive evidence of renesting. However, some of the very late nesters have been approached by pre-flight young, strongly suggesting the possibility of a second brood. Banding has proved that at least some of the young pelicans return to the original breeding grounds.

Royal Tern

The next, and most numerous, nesting species on Deveaux Bank is the Royal Tern. Working in one of these colonies is certainly one of the most spectacular and ear-splitting experiences that an ornithologist can have. The shrill and sometimes rasping calls of Royal Terns continue to be heard and remembered long after the visitor leaves a large nesting colony. No nest is built; only a slight depression in the sand usually pinpoints the location of the eggs. Each nest center is roughly 12 to 14 inches from the next, or twice the reach of the brooding bird's bill and neck. Toward the outer edges of the colony the nests tend to be spaced a little farther apart, at times as much as 16 to 18 inches between centers.

Published reports vary considerably regarding the number of eggs laid by the Royal Tern, some authors believing two or three eggs to be the usual number and only one on renesting. My work on Deveaux Bank substantiates the findings of E.J. DeCamps (*South Carolina Bird Life*, Sprunt and Chamberlain, 1949, p. 277). First clutches usually contain one egg, and so do second and third clutches. To date I know of only four nests that apparently represent a fourth nesting attempt during a single season. The eggs, like the chicks, look almost like Easter eggs in their variations. It is only necessary to say that a certain color is not seen in egg or chick before it can be found. The color variations affect all portions of the body—down, bill, feet, and legs.

Tomkins (1965) stated that "terns prefer a site where there is little wind turbulence." While this may be true in many instances, I have found that by far the most successful breeders on Deveaux are those located behind dunes where wind turbulence is the greatest. Nesting on open flats well away from tall grasses, the Royal Terns often lose their eggs to high tides. The terns are very alert and frequently all take flight from the sighting of a rat or lizard by one member of the colony.

During the 1965 season two new areas were utilized by the Royal Terns on Deveaux. About 400 eggs were laid on top of the high dunes. This area was 10 feet above high water and surrounded on three sides by grass, but the interior was relatively free of grass. About 350 pairs of terns nested on a sandy shelf half way up the ocean front dunes. These two sites are the only ones I have ever seen in any Royal Tern colony where the birds did not have an unobstructed view for several feet surrounding the nest sites. These eggs were laid the week of 2 May and had disappeared by 16 May, apparently at the hands of egg raiders. The vast majority of the Royal Terns (approximately 5,000 pairs) nested on the open sand flats where their eggs were three times washed away by high tides. Since incubation requires 20 to 21 days, Royal Terns nesting on areas covered by high tides must lay eggs less than a week after high tide in order to hatch successfully before the passing of a lunar month. Wind conditions may sometimes reduce the tides, but the Deveaux birds received no such good fortune in 1965. The fact is that only 2,094 Royal Tern chicks were banded in 1965, with an intensive banding program, while 5,679 were banded the previous season when weather conditions prevented the banding of over 50% of the young actually present.

Sandwich Tern

The Sandwich Tern usually begins to nest along with the Royals or within a day or two if along the perimeter of the egg site. Nests usually contain two eggs and are generally grouped together when found among the Royals. There is no apparent difference in the treatment accorded the Sandwich Tern by the larger, surrounding Royals. A rather comical picture is presented by the Sandwich, young and old, when standing among the Royals of a like age. The Sandwich Terns appear to have no legs (because they are so short) and glide along as they walk; there is not the discernible wobble of the relatively long-legged Royal.

In *South Carolina Bird Life* (Sprunt and Chamberlain, 1949, p. 279), attention is called to the fact that this species is "unusual after mid-August." One of the reasons is quite apparent: the young of the Sandwich mature for migration flight at about 6 to 7 weeks of age and leave the colony. Food for the larger young consists largely of squid, small elvers, and off-shore small fish. Young of this species swim well and sit much higher in the water than the Royals. In 1964 this species was so successful that the pre-flight young separated from the Royals, forming their own flock. The flock numbered about 250 young, and, alas, the writer was out of bands.

Laughing Gull

Shortly after the Royal and Sandwich Terns have begun to nest, the Laughing Gull begins to build and lay its usual three eggs in thick grass as close to the nesting Royals as possible. They also move into the Brown Pelican colony wherever the cover is thick enough. This species had only a single nesting record in South Carolina until rediscovered in 1933 (Sprunt and Chamberlain, 1949, p. 263), when a single nest was found in Charleston County on White Banks in Bull's Bay. The situation has certainly changed in recent years, much to the detriment of the smaller species of terns. In the Charleston area the Laughing Gull population is apparently limited by the nesting success of the Brown Pelican and the Royal Tern. Even though there may be many clutches hatched, there is a high mortality rate among Laughing Gull chicks if these other two species do not nest successfully because parent Laughing Gulls steal much food for their young from the young and adult Royal Terns and Brown Pelicans. Laughing Gulls also take food regurgitated by the young of other species which have been disturbed. Laughing Gulls sometimes feed on the eggs and young of the Royal Tern, but I have never seen them puncture the eggs of the Brown Pelican or Black Skimmer. Man frequently allows Laughing Gulls to destroy many eggs of the Royal Tern and other species by keeping the parents from protecting their nests.

The 1964 nesting season was highly successful for the Laughing Gull, but 1965 was a near disaster on Deveaux. Many young in all stages were found dead in 1965, and in most cases the fat rating was zero. This suggests that starvation was the cause of death, a not too surprising situation in view of the unsuccessful nesting season for the Royal Tern and the greatly diminished numbers of the Brown Pelican.

Wilson's Plover and Least Tern

I have not known the Wilson's Plover to nest in numbers on Deveaux Bank on any occasion, one to five pairs being the rule. The nest is usually hard to find, and I have never had the precocious young in hand. A clump of grass is selected for the usual clutch of three eggs. Although this species and the Least Tern use the same nesting areas, the nesting habits are different. The Wilson's Plover often uses a clump of grass facing an open area on at least one side and in many cases the clump will be in the middle of an open area. The parent frequently uses the "hurt bird" act to lure intruders from the nest or young. The Least Tern apparently requires some shell particles as a prerequisite for a nest site. I have been amazed to find four half shells of various bivalves arranged in a circle with the two or three eggs of the Least Tern in the center. Since the small birds could not possibly carry the shells, the sites must have been chanced upon. The young of the Least Tern leave the nest when two or

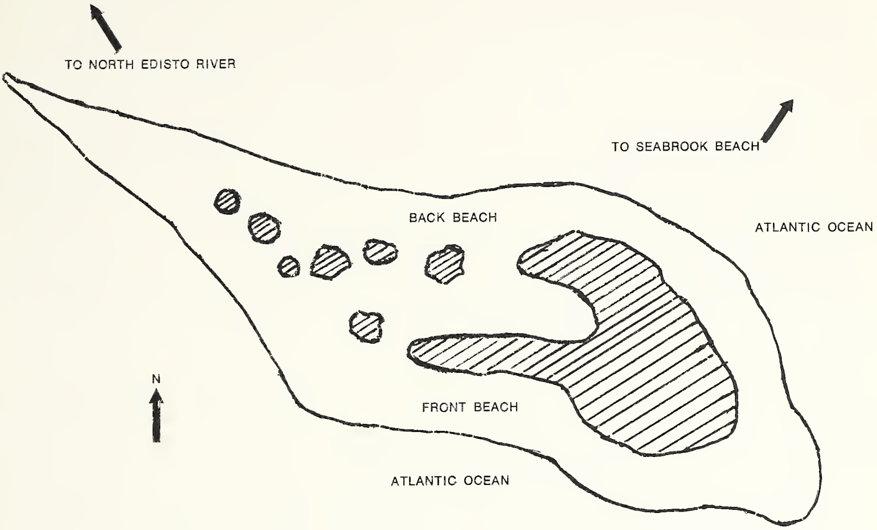

Figure 1. Map of Deveaux Bank showing high dunes (shaded areas) and beaches.

three days old and seek shelter in surrounding cover—a large shell, driftwood, or grass.

The Least Tern has never been very successful on Deveaux due to depredations of the large number of Laughing Gulls. I know of no young successfully reared in recent years though a fair number may nest in open sites on the higher portions of the open beach. In like manner I have never seen a brood of the Wilson's Plover successfully reared. No young of either species has been banded on Deveaux in the last two years to my knowledge. The Least Tern ceases attempts to nest, usually, if not successful by about mid-July. In this respect it is different from all other species using Deveaux as a nesting site. Neither the Least Tern nor Wilson's Plover is restricted to the off-shore banks; both use suitable mainland and island sites.

Gull-billed Tern

The history of the Gull-billed Tern has changed fast since the turn of the century. Wayne (1910, p. 4) listed it as a transient in the state. Sprunt and Chamberlain (1949, p. 265) record this species as being "established as a regular summer resident and it nests here, if only sparingly." Today this species nests every year and in apparently increasing numbers, although the population is still relatively small when compared to the Royal and Least Terns. The Gull-billed Tern seems capable of a quick shift in nesting sites from one colony to another if environmental factors have changed or eggs are washed. Future observations will be needed to confirm this ability to shift nesting sites, but the following is given as evidence in the 1965 season. In June there was a small colony on Bird Key, in the mouth of the Stono River; the eggs were washed and no attempt was made to renest before the breeders disappeared. On Deveaux Bank in 1965 the usual nesting sites on the low dunes were badly washed and no attempt was made to use them in the early part of the nesting season, June to mid-July. On Bird Bank in the Cape Romain Refuge the species apparently increased from about 15 pairs to about 40 pairs during the same period. Cape Romain has not been worked enough by the writer to determine the normal nesting population of this species, but there was an apparent increase of about 50 pairs on nearby Cape Island, according to F. Johnson (pers. cor.).

The Gull-billed Tern must of necessity travel to the mainland marshes and mud flats to obtain food for its young. The diet is mainly insectivorous, although small elvers and fiddler crabs (*Gelasimus* sp.) do form a large part of the diet. I have watched Gull-bills on the Sol Legare Flats, apparently picking out the smaller individuals among a vast army of fiddlers scrambling on the mud flats to reach their holes for protection. The Gull-billed Tern seems to prefer small openings on a rise surrounded by a thin growth of vegetation for nesting. No nest is built, and the two or three eggs are laid in a slight wallow in the sand.

COMMON TERN

The Common Tern was added to the state list as a breeding species in 1964 (Cutts, 1964) and was again present on Deveaux in 1965. Apparently about the same number of pairs (14 or 15) attempted to nest both seasons. They were not found in any other South Carolina tern colony for which I have data. The call of this species is quite distinctive, and the birds are much more persistent in driving off anyone approaching the nesting area than even the Gull-billed Terns. In fact, the bird gives away the nest location because it will come to meet the invader, with dives becoming closer to making physical contact as the nest is approached. The nest usually contains a few particles of grass and grass roots. The eggs number three to four, although Bent (1921, p. 240) states that a set may contain "sometimes five, and very rarely six." In 1964 this species nested on the grassed humps, but in 1965 the high spots on the back beach were used.

BLACK SKIMMER

Black Skimmers are probably the most persistent nesters found on the sandy keys in the Charleston area. Although a few do nest early, the vast majority do not start active nesting until about 10 June. Open flats are normally preferred. In 1964 the Black Skimmers used the northeast corner of the back beach for most nests, but their area had been completely washed by the 1965 nesting season. A small early nesting group used the high dunes on the back beach for a successful nesting, but the great majority used the back beach above normal high tide mark. Most of these nests were washed twice, once in June and again in early July.

The nesting adults carry on elaborate aerial courtships, flying one above the other, so close at times that they seem to be one bird. A constant call is used by the adults when on the wing and there seems to be a game of "you chase me and I'll chase you" in progress around the nest areas. This species prefers to take off into the prevailing wind, a characteristic that may be used to advantage when a bander is attempting to net adults.

No nest is built and at times the nest wallow is almost non-existent. Skimmers are great feigners of injury and have a habit of flying at a 45-degree angle with the wings striking the sand, causing a discernible vibrating sound, when trying to attract intruders from nest sites. Young skimmers are capable of leaving the nest after 48 hours but do not usually do so unless disturbed. It is most interesting to watch a nestling disappear while under close observation. The chick will squat and begin throwing sand into the air by moving the wings. On rare occasions a faint outline of the sand-covered nestling can be seen. This means of protection is not usually attempted in moist or hard packed sand (where it would not be effective) or by the larger nestlings which can out-run most intruders. Another interesting protective habit of the young is the apparent ability to determine when a person is approaching directly. If a Black Skimmer chick is approached at an angle as though the "squatting site" would be missed, it will continue to squat. The bander can take advantage of this behavior when attempting to capture skimmer chicks, which are good runners and will take to water for protection. The young are capable of flight when about six to seven weeks old, but apparently many do not realize this until forced to fly by an intruder's pressing the running bird very closely. This same behavior has been observed in a few Royal Terns and many Sandwich Terns; while being driven toward wire enclosures to await banding, they suddenly discover that they can fly.

Red-winged Blackbird

With the drop in the number of pairs of breeding pelicans, the entire habitat of Deveaux Bank can be expected to change. The Red-winged Blackbird had no habitat suitable for nesting prior to 1964. The large growing vegetation increased rapidly in 1965, so the number of nesting Red-wings will probably increase.

Mortality

The 1964 nesting season saw an exceedingly high mortality in the young Brown Pelicans. On several banding trips we removed more bands from dead birds than were placed on new young birds. On one occasion over 125 bands were removed. The dead nestlings were of a size that should have had little further mortality, five to six weeks old. Even after the young were flying, far too many bands were recovered locally. There can be only one cause for such mortality, which took the form of a paralysis, and that is chemicals (chlorinated hydrocarbons). Locally there was a terrific kill among marine life on which Brown Pelicans and other Deveaux Bank colonial nesters feed. Apparently two-thirds of the young pelicans hatched on Deveaux in 1964 were killed by chemical poisoning. The Royal Terns were not as severely affected because of a more varied diet, but for the first time paralyzed young were seen.

The chlorinated hydrocarbons also took a toll in the form of a higher than usual rate of infertile eggs, as high as 15% in the Brown Pelican.

The 1965 season proved disastrous for all species on Deveaux except the Black Skimmer. Like the others, the skimmer eggs were washed away by high tides, but their persistence alone assures success even if eggs must be laid in late August.

The only unusual form of mortality observed on Deveaux took place in 1964 when standing rain water apparently forced ants to feed on newly hatched chicks and pipped eggs. This occurred mainly among the Laughing Gulls. On one occasion my daughter, Jane, called my attention to "something trying to steal eggs" from under a Willet. When the bird flushed, the "something" proved to be two Sand Crabs (*Ocypoda aremarid*). They appeared to be hammering on the shells with their claws, but quickly scurried to their holes in the sand upon our approach. To date I have seen nothing in print as to how these crabs open eggs.

In 1965 a Coastal Geodetic Survey tower was erected on Deveaux Bank. The very fine guy wires giving diagonal support for the tower were not flagged; so many adult birds flying at night or on hazy days struck the wires and broke their wings and necks. There is no way of knowing the number hurt and killed because many injured birds undoubtedly made their way to the ocean, only to die later.

Population Trends

The Brown Pelican is being hit from all sides at once: land development, guns, chemicals—each takes its toll. This species' reproductive rate does not allow for high mortality in the young or adults. I do not believe that more than 1,800 pairs fledged young in the entire state of South Carolina in 1965. In the early 1960s Deveaux Bank alone produced from 7,000 to 10,000 young per year.

Banding can give a fairly accurate record of the number of breeding birds and the number of young reared, but it cannot cover the loafing adults. From experience in banding these large birds, I know that estimating their numbers is difficult and there is a tendency to over estimate the number present; however, I believe that the non-breeding Brown Pelicans are increasing on Deveaux Bank while the total population is decreasing.

The number of pairs of adult Royal Terns present showed a drastic decrease of over 50% in 1965, but it is possible that some of the Deveaux Bank birds moved to other colonies. We have a record of only one Royal Tern known to have returned to the natal grounds the following season.

Future of Deveaux Bank Colony

Although Deveaux Bank is owned by the state of South Carolina and has been thoroughly posted for the protection of the nesting birds, indiscriminate use of pesticides casts a shadow of doubt on the future of the colony. Man cannot control the tides, so Deveaux Bank may well wash once again beneath the waters of the Atlantic. However, if man does not discipline himself in the use of chemical pesticides, Deveaux may stand as a silent monument to the effects of chlorinated hydrocarbons upon our environment.

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William McIntosh, E.C. Clyde, and W.T. Van Velzen kindly furnished their seasonal banding totals to assist in preparation of this paper. E.B. Chamberlain and Francis Weston offered valuable advice. The late B. Rhett Chamberlain read the manuscript and offered constructive criticism of great value. T.A. Beckett IV, Timothy Cummings, and Thomas Gaillard were my companions on most of the banding trips and in all cases helped to make them successful. It would have been virtually impossible to prepare this paper for publication without the able assistance of my wife, who typed the manuscript.

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Magnolia Gardens, Route 4, Charleston, South Carolina.

CONSERVATION

GLADYS BUCKNER, *Department Editor*

BIRDS OF KALMIA GARDENS

WILLIE M. MORRISON

The site of Kalmia Gardens at Hartsville, South Carolina, originally a heavily wooded area, degenerated through the years into a "piece of land filled with red gullies" and at one time it was used as an old car graveyard. Today it is one of the main scenic attractions in the environs of Hartsville. Its regeneration is due to the vision of one woman, Mrs. David R. Coker. It is a demonstration of her belief that a garden can be made at little cost, that only a genuine love of plants is required. With this idea she set to work with two helpers and a mule and created one of the finest arboreta of the South, a laboratory for the study of botany, ecology, and landscape architecture. It contains seven of the eleven plant communities found in South Carolina and has practically all the plants indigenous to the State.

On the grounds is the added attraction of the historic Hart House which was built in the early 1800s. This house Mrs. Coker has restored and furnished in keeping with the period.

As a token of appreciation for her work Mrs. Coker was awarded the Eloise Payne Luquer Medal by the Garden Club of America in 1954.

Now that Kalmia has become an "Island of Green," many birds can find there the habitat of their choice. Willie (Mrs. A.E.) Morrison, a former teacher at Coker College, tells in the following article of her bird observations made in the garden which she visited several times a week from May 3rd to July 25th, 1966.—DEPT. ED.

Kalmia Gardens is located about three miles west of Hartsville on Carolina Avenue extension or 151 Alternate. From McBee, the entrance gates on the left are about a mile from 151 by-pass going to Darlington. The garden is open to the public without charge. There is a parking lot west of the house.

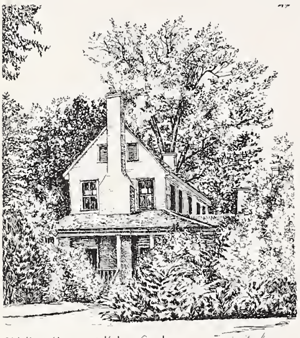
Mrs. David R. Coker has been developing this tract of land for 35 years and now it is a showplace of the Pee Dee area. Recently she endowed it and deeded 30 acres to Coker College for an arboretum as a living memorial to her late husband, Dr. David Robert Coker, a pioneer plant breeder of the Southeast whose accomplishments were foremost in the field.

The topography of this arboretum which borders on Black Creek is unique in that trees, shrubs, and flowering plants typical of all parts of South Carolina find a suitable environment here. The rhododendron and laurel of the mountains thrive equally well as the azaleas and cypresses of the low country.

The walks follow the natural contour of the locality and at intervals there are concrete benches which make perfect stopping places for the bird watcher. He may spend hours, a whole day, or many days in the arboretum and feel that only the obvious birds have been sighted, for many of them remain hidden in the dark recesses of the swamp or in the laurel and smilax thickets.

On the wires approaching the garden may be seen Eastern Bluebirds, Loggerhead Shrikes, Mockingbirds, Eastern Kingbirds, Mourning Doves in pairs, or even a Sparrow Hawk. Starlings, Red-winged Blackbirds, and Common Grackles are commonly seen, and in the grasses along the roadside are House and Field Sparrows.

After arriving at the garden the bird watcher may well pause at the grassy parking lot. A Bobwhite may appear under the shrubbery or a pair may be feeding near a car. In the fall the whole family of from nine to fifteen birds may be seen. Near the gate Chipping Sparrows feed on the ground and Blue Grosbeaks feed on the tall grasses. Overhead in the tall shrubbery or low trees a pair of Summer Tanagers in May are just beginning to set up housekeeping. A visit in July is rewarded with a view of an entire family. From the treetop comes the raucous call of the Great Crested Flycatcher, or the song of the Brown Thrasher, or the sweet note of the Cardinal which seems to outnumber all other birds in the garden.


Old Hart House at Kalmia Gardens
Hartsville, S. C.

In front of the house is a stand of pines with large, very old cedars lining the drive. Here are found Pine Warblers, Brown-headed Nuthatches, Yellow Warblers, Carolina Chickadees, and Tufted Titmice. In June and July families of these birds in all stages of development may be seen in the dogwoods, laurels, and hollies nearby.

The walk bordering the swamp is reached by way of the side garden at the left. Here in the tall Willow Oaks are the Orchard Orioles and the vireos—the Red-eyed, the White-eyed, and the Yellow-throated. Here the Hooded Warbler's voice, the loudest in the swamp area, is rivaled only by that of the Yellow-throated Warbler. In some evergreen bushes the sibilant, rising-scale notes of the Prairie Warbler are heard before the bird is seen, and high in the trees are the Blue Jays.

The swamp garden paths, bordered with Partridge Berry, descend to the biggest pine of the woodland around which are steps leading to the level with the swamp. Here may be seen the Northern or the Louisiana Waterthrush, or possibly the Gray-cheeked Thrush. Myrtle Warblers and White-throated Sparrows may still be seen in early May; the soft whisper of the one is in sharp contrast to the clear, plaintive call of the other. The newly arrived Wood Thrush can be seen under trees or shrubbery, and the Belted Kingfisher announces his presence with rattly, strident shrieks across Black Creek.

The Swamp Garden is ahead, a large, circular clearing surrounded with the tallest trees of the area. On May 3rd Cedar Waxwings and Ruby-throated Hummingbirds were feeding on the flowers of the Tulip Poplar as dozens of warblers, intermingled with a few American Goldfinches, fed on the cypress blossoms. Among the warblers were the Black-throated Blue and the Blackpoll.

As late as July 25th (my last observation), the following warblers were seen: Prothonotary, Parula, Black-and-white, Yellow, Prairie, Yellow-throated, Yellowthroat, Pine, Kentucky, and the American Redstart.

Also in the swamp area can be heard and seen the Yellow-shafted Flicker, the Pileated Woodpecker, the Red-bellied, the Red-headed, the Downy, and the Hairy. Several nesting holes of these birds were in actual use. The Red-cockaded Woodpecker was seen looking for food in the pine grove near the house.

The upper paths that lead back to the open, sunny areas afford a view of the Galax leaves growing under the Mountain Laurel and of a bank covered with Trailing Arbutus.

(Continued on page 106)

Backyard Birding

Annie Rivers Faver
Department Editor

Wasp Control . . . At No Cost

For several days this summer, we had watched the nest building activities of a group of social wasps *(Polistes)* on the outer framework of our living room window. Just at dusk on July 4, we noticed a bird repeatedly flying up to the window. Upon closer observation, we found that it was a male Summer Tanager which was flying up to the wasp nest, neatly capturing an adult wasp each time without any apparent disturbance of the others on the nest, and then retiring to the roof of our nearby automobile to eat his prey. While we watched at the window, he made nine more successive (and successful) trips to the nest, catching every adult wasp that was there. The following day there were a few wasps at the nest but within the week all were gone, although we did not notice the tanager at the nest again. None of our bird- or wasp-watching friends had seen tanagers feeding on adult wasps in a similar fashion, but according to Martin, Zim, and Nelson in *American Wildlife and Plants: A Guide to Wildlife Food Habits*, wasps provide one of the major insect foods of the Summer Tanager.—Sheila Counce Nicklas, Durham, N. C.

Notes from Hendersonville

We have just completed our first year in the Western North Carolina hills, and as of this date (August 2, 1966) our not particularly intensive observations have produced a total of 54 species on, above, or adjacent to, our three acre knoll six miles southwest of Hendersonville at approximately 2,300 feet.

Two promptly erected bluebird houses found ready takers and each produced a set of young ones (although only one hatched in one of the houses). During July the place resembled a sort of avian nursery, with immature Robins, Cardinals, Brown Thrashers, Blue Jays, Eastern Bluebirds, Eastern Wood Pewees, and Yellow-shafted Flickers being fed, coaxed, or scolded all over the place.

We left a wide swath of uncut grass and weeds as a cover for a small covey of Bobwhites and are now and then rewarded with seeing them rest in the shade of the shrubbery or sedately strut across the lawn.

It took us some time and much doubt till we concluded that "our" chickadees were the Carolina's. To say that they are slightly smaller than the Black-capped is not of much help. Their slightly different sound convinced us.

The Prairie Warbler was seen on April 21, and the same night we heard the first Whip-poor-will. A male Canada Warbler was observed on July 30 and a Yellow-throated Warbler on the 31st, both only once.

So much for the birds. We also have Five-lined Skinks whose blue tails match the brilliance of the Indigo Bunting. When we come home late, we usually in the glare of the headlights, find a large phlegmatic toad (which I take to be Fowler's) sitting in front of the garage door. I have to nudge him out of the way almost inch by inch since he only reluctantly gives up his favorite spot. Somehow he seems to have escaped the attentions of a 58-inch long Black Racer *(Coluber constrictor)*, which Bill Palmer of the N.C. State Museum kindly identified on the basis of a shed skin, thereby considerably contributing to my peace of mind. —RUDOLF G. HOSSE

What Should We Feed Hummingbirds?

A word of caution regarding the feeding of hummingbirds comes from the August 1966 issue of *Flower Grower, The Home Garden*, page 4. In a letter to the Readers' Own Corner, Mrs. F.G. Stopps of Seattle, Washington, writes: "Honey is fatal to hummingbirds. Sugar is recommended, but not in such a strong solution as suggested [in the August 1964 *Flower Grower*] article. The proper proportion is 1 part sugar to 4 or 5 parts water—not any stronger or liver trouble will result." Mrs. Stopps cites to support her statements research conducted by, among others, the Seattle Audubon Society and J. Van Oosten, a local authority who imports hummingbirds from South America and breeds them. Dr. A. Ruschi, of Brazil, she continues, "refutes categorically the use of honey for hummingbirds. He suggests attracting fruit flies for added protein by the use of a container filled with banana or other fruit peelings." While we have not examined the evidence first hand, we believe Mrs. Stopps' warning should be heeded when the time comes to fill the hummingbird feeders next spring. We are indebted to Mrs. George C. Pyne Jr., of Durham, N.C., who brought this important information to our attention.—DEPT. ED.

Rx: Watch Birds

About the middle of September my doctor prescribed that I do nothing more strenuous than watch birds all day long and lift nothing heavier than a pair of binoculars. This I have been doing for six weeks, and the prescription is apparently effective.

To the north, our garden is two blocks from Prestwood Lake, which is fed by Black Creek, on each side of which are large Cypress swamps. Along the garden's western boundary is a neighborhood road, across which is an acre of undeveloped, almost virgin growth known locally as "The Cave." There is a stream flowing through this area and emptying into Prestwood Lake. From this region and the swamps come many birds to our feeders, water "misters," and sprinklers, which go 12 to 24 hours a day in the culture of Camellias and Azaleas. My husband and I think that the above conditions enable us to attract many unusual species of birds to our yard.

For over 30 years we have watched the Red-bellied and Red-headed Woodpeckers, Downies, and Yellow-shafted Flickers bring their young to our backyard. In recent years the Hairy has been an infrequent visitor as has the Pileated Woodpecker. These big birds come in from the swamps, observed mostly flying overhead. Only three times this summer have I seen them stop off in the yard, only to be chased away by Blue Jays or Mockingbirds.

On the morning of October 16 I watched a pair of flickers for 25 minutes in a big dogwood tree going through all the antics of courtship, acting like it is was April instead of October. They played "peek-a-boo" around the trunk and "follow-the-leader" up and down the branches; then they would sidle up to each other, throw their heads up, and murmur little songs, seeing which one could toss or swing its head higher.

During the afternon of October 7, I was watching American Redstarts when two Yellow-bellied Sapsuckers flew onto the trunk of an oak tree. This is the earliest date for arrival that I have. (*South Carolina Bird Life* lists October 4.) The next morning and every day since, there have been at least seven different individuals, identified by the amount or lack of red on head and throat.

Both the Great Crested Flycatcher and the Eastern Wood Pewee came in the last of April, nested in our big oaks, and departed the first week in October. By the middle of October the Eastern Phoebe had arrived to be our flycatcher winter resident.

The appearance of the White-breasted Nuthatch in my yard on October 7 was a thrill for me. I have known this lovely little fellow in the mountains every summer around Lake Summit near Tryon, N.C., but had never seen him in my yard. He had a small acorn in his beak and was trying to find a place to park it. On the 10th two more came to an oak tree. One stayed on for several minutes and pecked at a knot-hole like a woodpecker. About 1:30 PM on the 15th two flew in with their nasal "yank-yank" to announce their arrival. Further checking revealed two more on a pine trunk and another in the Deodora Cedar. Another was seen working up the trunk of a Willow Oak on the 28th.

Brown Creepers fascinate me. They are scarce and have to be looked for. I have been on the lookout for these little fellows and many a time have been fooled by wrens that are sighted on tree trunks. On October 7 I found one working his way along a pine limb upside down. I caught his silhouette and thought it was a nuthatch. From time to time I would see one. On Sunday moning, October 23, I was watching a Baltimore Oriole devouring a white fuzzy caterpillar when a creeper appeared. Searching for others, I found three in the Post Oak, one in a Water Oak, and two more on a pine tree.

Our first cool spell in October brought in the Ruby-crowned Kinglets on the 18th. Three were seen at first and by the 20th I had six in trees and bushes. They are such "big-eyed" busy little fellows . . . around all day, now, and I have spotted the ruby crown several times, a beautiful deep rich red. By the 28th, as many as a dozen can be seen early in the mornings.

For 45 minutes on the morning of October 27, I watched a flock of Golden-crowned Kinglets all over the backyard in the oaks and tall shrubbery. They were easy to spot not only because of their kinglet movements and head stripes (and golden crowns—no orange crowns seen), but also because they kept up a constant chatter in their high wiry little voices. I did not see them come, and in the space of scanning the yard for others, they were gone. At 3:00 that afternoon, I counted 27 Golden-crowned Kinglets, 11 in the Post Oak at one time. A smaller flock was present the next morning.

The Red-eyed Vireo is the most abundant of the three summer resident vireos. The last one was seen on October 24. *South Carolina Bird Life* lists the Yellow-throated Vireo from March 15 to September 21. I have recorded sightings on October 1, 2, and 6, then on the 8th and 17th with Red-eyed and White-eyed Vireos.

During the fall warbler migrations I observed that when the Black-throated Blue Warblers arrived on October 6, I could find no females. Then on October 11 the females arrived in company with Magnolias and Parulas. This has truly been a Parula summer. There have not been many days when I haven't been able to find at least one somewhere in the yard. I noticed that they travel with Carolina Chickadees and Tufted Titmice.

Next to Parulas and American Redstarts, the Magnolia Warbler has been the most abundant of the fall migrants. I first saw them September 15, mostly around Azaleas and Camellias where the "misters" were going. The first time I noticed them I didn't pay any attention, thinking they were female redstarts. Suddenly it dawned on me that I was seeing yellow-streaked breasts and yellow-rumped birds with big *white* splotched tails as they fanned them out in the redstart manner. From then until October 17, I had them every day. The males were mostly in fall plumage, ranging from pale to deep yellow breast and wings marked with white splotches in various sizes to two wing bars. Some females and immatures had no yellow beneath the streaks. The marks on the breast varied from full streaked to a few along the sides, but always the yellow rump, white under coverts, and tail markings with that black band at the end.

One warbler that puzzled me when he came in on October 11 was the Black-throated Green Warbler. His fall plumage and look was so different from the ones seen in April. This warbler was still around on October 25, several days later than the October 19 departure date given in *South Carolina Bird Life*. On October 6 I spotted my first Myrtle Warbler that had arrived for the winter. By the 17th I was seeing one or two nearly every day.

The most exciting arrivals have been the Baltimore Orioles, which gave me a new record. On *September* 25 I saw an adult male come into the Willow Oaks. Later in the day he was down in a Camellia bush under a "mister" drinking droplets of water. The next day three more were sighted feeding high in the oaks, a male and two females or immature birds. All through October they continued to return every day until they have become quite commonplace . . . always feeding high in the oak trees. By the 25th they had begun to leave the treetops and to eat at feeders set up for them.

While watching a Baltimore Oriole, into my field of vision came a male American Redstart. Has anyone else ever noticed that these two are so similar in coloration that the redstart looks like a lovely little miniature of the male Baltimore Oriole?

By the middle of September all the red male Summer Tanagers had turned into "golden birds" like the females, eating dogwood and blackgum berries. They were gone by the middle of October. A rare occurrence for us is the sighting of a Scarlet Tanager. On October 8 one arrived to eat dogwood berries. Up until the 13th I had one to three every day—all in fall plumage—no red.

My White-throated Sparrows began arriving on October 22. On that morning, coming from different parts of the yard, were three little plaintive songs that once heard will always be remembered.—Mrs. A. E. Morrison, *1610 Home Avenue, Hartsville, South Carolina.*

CONSERVATION

(Continued from page 102)

If the ivy bordered path that leads to the service road and the highway is taken, the Eastern Wood Pewee, the Acadian Flycatcher, the Catbird, and Carolina Wrens with their families can be seen. Overhead are the Crows, Chimney Swifts, and the Red-tailed and Red-shouldered Hawks. Late in the afternoon the Common Nighthawk circles and in the distance an owl or a Chuck-will's-widow calls.

Blue-gray Gnatcatchers and Robins of various ages are constant companions to the bird watcher, and the Rufous-sided Towhee gives a friendly greeting from the shrubbery of the upper garden. Near the gate are the Eastern Meadowlarks in the grass, the Purple Martins above, and higher still two vultures give the visitor a long distance lookover as he leaves behind this green world of beauty and song.

General Field Notes

James F. Parnell, *Department Editor*
Wilmington College, Wilmington, North Carolina

NEW DEPARTMENT EDITOR

Dr. Thomas L. Quay, professor of Zoology at North Carolina State University at Raleigh, has accepted the editorship of the General Field Notes department of the *Chat*. Dr. Quay has been an active contributor to the bulletin almost from its inception, having served for a time as associate editor under John H. Grey Jr. and as editor for two years in the early 1950's. Dr. James F. Parnell will continue working with this department as co-editor and will compile the Briefs for the Files. He will also continue as regional editor for *Audubon Fields Notes*. Carolina Bird Club is indeed fortunate to have two such capable men willing to devote their time to its bulletin. Please send field notes for the March *Chat* to Dr. Quay at the Zoology Department, N.C. State University, Raleigh, N.C. 27607.—Ed.

Atlantic Blue-faced Booby off Bogue Banks, North Carolina.—On 7 June 1966 at 2:00 pm while bird-watching at the Bogue Banks about two miles west of Beaufort Inlet and about 300 yards off the beach, I saw what I believe to be the first Atlantic Blue-faced Booby *(Sula dactylatra dactylatra)* to be reported in North Carolina waters.

The first bird seen was, for the most part, a dusky brown with a white belly and a well-defined white rump. In spite of the dark plumage of the head, the face was detectably darker. Its attitude in flight and silhouette were similar to that of a Gannet, but the size was clearly smaller and the wing beat faster. Its flight was one of alternate flapping and sailing. After I had watched this bird for several minutes through a Balscope set at 30X, a second immature Blue-faced Booby, which I had not previously seen, flew into view and joined the first bird. The second individual's plumage was similar to that of the first bird. Both birds finally flew out of sight in an easterly direction.

At the time of this observation the sky was clear; the wind was from the south at about 15 mph, and the tide was falling. It is of considerable interest that at this time tropical storm Alma extended over some 200,000 square miles of the Caribbean Sea. Rain and 50 mph winds reached our coast by the night of 10 June. —Robert P. Holmes, *306 Country Club Road, New Bern, North Carolina.*

Rough-legged Hawks at Lake Hartwell.—On 12 April 1966, while standing in a field between Interstate Highway 85 and Lake Hartwell backwaters north of Anderson, South Carolina, I noticed two large Buteos flying north at an altitude of 200 to 300 feet. As I watched them, one of the birds started circling and losing altitude by partially folding the wings. It came down to about 30 feet about 40 yards away. At this point, it hovered, in the manner of a Sparrow Hawk, over the tops of some pines in a field directly across the road from me. As the bird hovered, with legs extended, I could plainly see the feathered tarsi. The general color of the upper plumage was a dark sooty brown. The tail was very faintly banded with dull white. The breast and belly were dark. The wingtips were black with a white band near the tips of the primaries.

When I realized that I was watching a dark-phase, Rough-legged Hawk *(Buteo lagopus),* I quickly located the other bird which was circling at some height. It showed a flight pattern identical to the first bird. On 15 May a normally colored bird of this species was watched for some time, in flight, over a field across the road from my house near Anderson.

These large Buteos are extremely rare in this area. These are the first I have observed in almost 15 years of "birding" in this region.

The 5th edition of the *A. O. U. Checklist of North American Birds* lists the Rough-legged Hawk as a casual winter visitor as far south as Thomasville, Georgia, and *South Carolina Bird Life* (Sprunt and Chamberlain, 1959) lists them as rare winter visitors in the coastal area.—ADAIR TEDARDS, *207 Brown Road, Anderson, South Carolina.*

Unusual Prey for Osprey.—On 20 March 1966, my husband and I explored the Lockwood Folly River in our boat for several miles inland from Long Beach, North Carolina, counting Ospreys and the nests that seemed to be in use, and watching the Ospreys chase away the trespassing crows. It was a common sight to see an Osprey flying inland with a fish in its talons, but we were amazed to look up and see one directly over the boat, flying upriver about on a level with the tops of the cypress trees, clutching a big rat. Unbelieving, I looked again, through 10x50 binoculars, and it unquestionably was the familiar Fish Hawk, carrying a very strange fish indeed. It was close enough for us to observe without glasses the rat's brown, furry body and the long, skinny, apparently hairless tail. The body appeared to be six or seven inches long and the tail was about the same length. The bird was holding it upside down and only the back was visible to us.

Pough's *Audubon Water Bird Guide,* Robbins, Bruun and Zim's *Birds of North America,* Pearson and Brimley's *Birds of North Carolina* and Sprunt and Chamberlain's *South Carolina Bird Life* all state that the Osprey's only food is fish. Forbush and May's *Natural History of American Birds* says, "The food of the Osprey consists principally of fish. Now and then perhaps a frog or some other small aquatic animal is taken, and more rarely a water-snake." Bent's *Life Histories of North American Birds of Prey* says, "If the osprey ever takes any kind of food but fish it must be on very rare occasions; I can find very little positive evidence of it. It has been reported as eating young ducks, snakes, and frogs. Witherby (1924) says that it has been known to take chickens and that beetles have been found in its stomach . . . . Benjamin R. Warriner (1934) saw an osprey catch a turtle . . . ."

Victor H. Chahalane's *Mammals of North America* describes the swamp rice rat (a subspecies of the rice rat, *Oryzomys palustris,* of South America) which is found along the Atlantic coast as far north as New Jersey, often in salt marshes. It is 9 to 12½ inches long. This measurement includes the tail, which is about the same length as the body and has very little hair. The rat is brown, with underparts lighter. It dives, and swims under water for a good while before it has to come up for air, a thick undercoat keeping the body dry. Of course, it is impossible to be sure that the captured rat was this species, or even that the species is found at Long Beach. However, in June 1965, a rat that looked just like this one was seen on the dunes in front of our cottage, apparently hunting for food among the dune plants. A few days later, it (or a similar one) was seen to cross the dunes in an open spot between patches of vegetation; and a minute later, four baby brown rats scooted across after it, single file.

Although I can only speculate upon the sequence of events leading to the capture, I am certain that a rat is indeed unusual prey for the Osprey. This is the only time in my years of coastal birding that I have seen an Osprey with anything other than fish.—Jean McCoy, *1100 Buckingham Road, Greensboro, North Carolina.*

Reeve at Cape Hatteras National Seashore, North Carolina.—On 14 July 1966 Mrs. Colgate Darden, Miss Eugenia Scott, Mrs. Ben Coffey and the writer were at Bodie Island, North Carolina. We spotted a bird feeding along with Lesser Yellowlegs and a Semipalmated Sandpiper. Its appearance was strikingly different. The body size was about that of the Lesser Yellowlegs, but with shorter legs. It was studied for about 15 minutes with 7X binoculars and zoom telescope at a distance of about 100 feet. The breast feathers were heavily streaked giving it a scaled appearance. The entire head, neck, and back were brownish with a scaled effect. No eye stripe was present.

One observer waded out to within 40 feet and flushed the bird. A very faint stripe showed in the wings. The tail had a dark stripe down the center and appeared edged with buff across the white outer feathers. The legs were darker than those of the yellowlegs, but not black. After the bird was flushed it landed about 100 yards away, then after a few minutes it returned to the original spot. No call was given when it flushed.

A study of field guides kept bringing us back to a Ruff or Reeve. A sketch was made of the bird showing all field marks, and after returning home and checking all available material and through elimination we still felt it was the visitor from Europe.

On the following Tuesday, 19 July, Mrs. Coffey and the writer were in Washington, D.C., and went to the Museum of Natural History, where Dr. Slud kindly permitted us to study skins of the Ruff and the Reeve. The plumages of this species are widely variable, but one skin of a Reeve matched our Bodie Island bird in appearance. We feel reasonably sure our bird was a Reeve.—Mrs. Floy C. Burford, *6049 Lake Terrace Circle, Norfolk, Virginia.*

Saw-whet Owl on Mount Mitchell: a Summer Sight Record.—*Birds of North Carolina* (1959, revised) gives the Saw-whet Owl as a casual winter visitor in North Carolina, the earliest record cited being 9 September. Arthur Stupka (*Notes on the Birds of the Great Smoky Mountains National Park*, 1963), based on numerous singing records going into June and one good sight record (29 May 1957 on Mt. LeConte) lists this bird as an uncommon resident of the Park. Since the presumed nesting area is the watershed ridge which is the North Carolina-Tennessee state line, our area can thus claim this species as a resident. The following may therefore be of some interest.

On 3 August 1966 a party of four who were climbing the northeast side of Mt. Mitchell saw an adult Saw-whet Owl at 10:30 AM at an altitude of about 4,500 feet. We were following the trail from Black Mountain Campground (near Busick), and, while passing through a group of spruces saw an unusual looking bird fly up to a low branch about 25 feet away. The party included Dr. David A. West, Professor in the Biology Department of Virginia Polytechnic Institute at Blacksburg, Virginia, a trained ornithologist, who immediately identified it as a Saw-whet Owl. Following the usual tameness of the species, it remained under close observation in excellent light for five minutes or more. The characteristic facial markings were very clearly visible. It did not fly away until the party moved to pass near it on resuming the trip.—William A. West, *P.O. Box 1283, Tryon, North Carolina.*

Barn Swallow Nests Discovered in Johnston County, North Carolina.—On 9 October 1966 Mrs. Nevell Davis and I noticed a mud structure, apparently a bird's nest, attached to the side of a rafter in the pack barn at the home of my mother, Mrs. Albert Davis, near Archers Lodge in northern Johnston County, North Carolina. On 15 October Eloise F. Potter examined the nest and found it to be of typical Barn Swallow construction, made of mud and straw with a lining of straw and chicken feathers. We searched the other buildings on the Davis farm and found a second Barn Swallow nest, this one being in a stable about 200 yards from the pack barn. Three farm ponds are within sight of the buildings occupied by the swallows. Although we found no indication that Barn Swallows nested on the Davis farm prior to 1966, my nephew, Philip Davis, recalls having seen Barn Swallows several years ago flying in and out of a corn crib on a farm about one mile away. He assumed that the birds were nesting, but he did not actually see the nests.

Parnell et al. (*Chat*, 27:62-64, 1963) found Barn Swallows nesting at Lake Johnson in Wake County in 1961. In 1962 the species was found at Lake Benson in Wake County. The Johnston County site is approximately 20 miles east of Lake Johnson and about the same distance northeast of Lake Benson.—Mrs. Lee O. Daniels, *P.O. Box 547, Zebulon, North Carolina, 16 October 1966.*

Continued Nesting of Cliff Swallows at Lake Hartwell in Western South Carolina.—On 16 April 1966 Cliff Swallows returned to nest at Hartwell Dam near Anderson, South Carolina, for the second year. On this date only seven birds were seen, but by 23 April over 50 birds were present. By 21 May nesting was well underway. At this time four nests were visible in number nine sluice and three in number ten sluice. Some of the nests were again out of sight under the concrete overhead of the sluices, so no accurate count could be made. Some of last year's nests were apparently being repaired for re-use.

In addition to these sites, the birds were also using a series of steel supports beneath a fishing ramp on the Georgia side of the river. There were about six nests at this new location.

On the final visit to the colony in late July, it was apparent that the nesting season had been successful. Most of the young birds had left the nests, only two nests being active at this time. Many immatures could be seen perching on the face of the dam and flying with the adults.—Adair Tedards, *207 Brown Road, Anderson, South Carolina.*

BRIEFS FOR THE FILES

Compiled by James F. Parnell
(all dates 1966)

Common Loon, a flightless individual found very early on 2 August at Murrell's Inlet, S.C., Mrs. Ellison Smith.

Horned Grebe, 1 very early in canal at Litchfield Beach, S.C. on 26 September by Mrs. Ellison Smith.

Brown Pelican, present in very low numbers at Murrell's Inlet, S.C. this summer, Mrs. Ellison Smith.

Cattle Egret, 15 seen at Clemson, S.C. during mid-April for first record in area, Gaston Gage; 7 seen at Elkin, N.C. on 5 October by E.M. Hodel; over 100 in field 10 miles east of Columbia, S.C. on 22 September, Mrs. Ellison Smith.

Canada Geese, 7 quite early on Wacamaw River in Georgetown County, S.C. on 3 September, Mrs. Ellison Smith.

American Scoters, a small flock at Murrell's Inlet, S.C. on 4 September was quite early, Mrs. Ellison Smith.

Osprey, a sizable migratory movement was observed at Litchfield Beach, S.C. on 26 and 27 September by Mrs. Ellison Smith. Birds were seen moving south all during the day with as many as five in sight at once.

Peregrine Falcon, 1 observed to take a Lesser Yellowlegs at L. Wheeler near Raleigh, N.C. on 8 October, R.J. Hader.

Semipalmated Plovers, recorded at N. Wilkesboro, N.C., for first time by Wendell Smith when 2 were seen on 28 August.

Long-billed Curlew, 5 seen among a flock of Wimbrel at Hilton Head, S.C. by Mrs. C.G. Newhall.

Gray Kingbird, 1 studied at close range on 5 August at N. Wilkesboro, N.C. by Wendell Smith.

Western Kingbird, 1 studied carefully as it perched on a pasture fence near Elkin, N.C. on 6 October, E.M. Hodel.

Yellow-bellied Flycatcher, 1 seen and heard at Raleigh on 20 August by Mike Browne and Mark Thompson.

Traill's Flycatcher, 1 banded at Chapel Hill on 20 August and a second on 3 September by R.P. Teulings.

Least Flycatcher, 1 banded at Chapel Hill on 11 September by R.P. Teulings.

Philadelphia Vireo, 2 studied carefully at Doughton Park on the Blue Ridge Parkway in western North Carolina on 25 September by Royce Hough and others from Winston-Salem; a single individual was observed closely at Raleigh, N.C. on 6 October by R.J. Hader.

Golden-winged Warbler, 1 adult and 1 immature seen near Wrightsville Beach, N.C. on 24 September by Lee Jones and Phil Warren.

Chestnut-sided Warbler, 1 seen at Wrightsville Beach, N.C. on 24 September by Lee Jones and Phil Warren.

Mourning Warbler, 1 found dead on sidewalk at Blowing Rock, N.C. on 27 August, Gaston Gage; 1 banded at Chapel Hill, N.C. on 3 September, R.P. Teulings.

Bobolink, 1 female at Bull's Island, S.C. on 2 June was late for this area, W.M. Shepherd; a male in breeding plumage (beginning to moult) was seen on 16 July near Raleigh by R.J. Haler and P.W. Sykes.

Yellow-headed Blackbird, 1 male observed closely on 2 September, 67 miles ENE of Cape Hatteras, N.C. by Stanley W. Wecker of the City University of New York. The observation was made from the deck of the S.S. Oceanic as it returned from Nassau. The bird circled the ship and was observed carefully through binoculars.

Orchard Oriole, 1 female seen on 7 August on Bodie Island, N.C. by Paul W. Sykes.

Baltimore Oriole, 1 seen on Wrightsville Beach, N.C. on 24 September by Lee Jones and Phil Warren.

Rose-breasted Grosbeak, 1 seen at Ft. Fisher, N.C. on 25 September by Lee Jones, Phil Warren, and J.F. Parnell.

Indigo Bunting, 1 female late at the CBC sanctuary on 21 October, W.M. Shepherd.

Lark Sparrow, 1 on 9 September at Hilton Head, S.C., C.G. Newhall and Virginia Harrall; 1 on 24 Sebtember in yard at Winston-Salem, N.C., John P. Davis; 2 seen on 25 September at Ft. Fisher, N.C. by J.F. Parnell, Phil Warren, and Lee Jones.

White-crowned Sparrows, 2 banded at Chapel Hill on 22 October, 1 on 29 October, and 1 on 30 October. All were immatures, R.P. Teulings.

Lincoln's Sparrow, 1 banded at Chapel Hill, N.C. on 30 October by Robert P. Teulings.

BOOK REVIEWS

> **Birds of North America,** the new field guide by Robbins, Bruun, Zim, and Singer, is available both paperbound, as mentioned by our reviewer, and clothbound ($4.95). Although my paperbound edition appears to be holding up well in use, the clothbound edition may well justify the additional cost by giving longer service.—ED.

The Ivory-billed Woodpecker. James T. Tanner. 1942.
The Roseate Spoonbill. Robert P. Allen. 1942.
The California Condor. Carl B. Koford. 1953.

Republished by Dover Publications, Inc., 180 Varick St., New York, N. Y. 1966. Paperbound, $2.00 each.

Nearly every bird watcher in North America is familiar with the basic findings set forth in the three National Audubon Society research reports which laid the foundations for current attempts to protect the Ivory-billed Woodpecker, the Roseate Spoonbill, and the California Condor. However, these standard reference works have been read in full by relatively few bird students. Out of print and difficult to obtain for several years, they are now available at a modest price and still make interesting reading.

NEWS AND COMMENTS

Report Available on Field Trip to Mexico

During the summer of 1966, the department of biology at Davidson College sponsored an independent research field trip to Mexico for the purpose of allowing each student to pursue his special field of interest in depth while also acquiring a basic knowledge of the ecology of Mexico. Leaving Davidson on 14 June, our group consisted of eight students and our professor, Dr. Tom Daggy of Davidson. We crossed the Mexican border on 18 June; and from then until 19 July, we traveled, camped, and studied throughout the country—from Texas to Guatemala; from the lush rainforests of Tamazunchale, Xilitla, and El Salto Falls to the arid deserts of the central plateau; from the steamy Caribbean lowlands of Veracruz and Lake Catemaco to the bitter, wind-swept snow line of Volcan Popocatepetyl; and from the rugged Pacific coast of Tehuantepec to the magnificent pine forests in the high mountains of Chiapas. Doug Pratt and I, who were the only ornithologists on the trip, recorded positive identifications of some 238 species of birds, including such beauties as the White-tailed Kite, the White Hawk, Blue Crowned Motmot, White-naped Swift, and Emerald Toucanet. Our best field work was done at El Salto Falls, Lake Catemaco, and Tuxtla Gutierrez, where we spent an afternoon with Senor Miguel Alvarez del Toro, Mexico's noted ornithologist.

For any interested CBC members I have a mimeographed paper listing all species and localities of birds seen on the trip, a thorough bibliography of Mexican birds, a detailed description of the route covered, and additional information—all of which would be of considerable value to anyone planning a trip to Mexico for ornithological purposes. The lists are available for 20¢ to cover the cost of postage and materials. Send requests to Box 923, Davidson, N.C. or to Box 167, Statesville, N.C.

The entomologists were well-blessed also, collecting a total of nearly ten thousand insect specimens, including such finds as the beautiful iridescent-winged blue Morpho butterflies, swallowtail butterflies with transparent wings, and one astounding damsel fly with a 6 inch wing-spread!

Perhaps the one single thing which we all "caught" in Mexico was an intense love for this beautiful and rugged land and an equally intense desire to return there someday soon for a closer look at its magnificent panorama of natural history.—MARK SIMPSON JR.

Request for Information

I need information concerning nesting, distribution, and summer records of 1) the Swainson's Warbler in or near the mountains of North Carolina, Tennessee, Virginia, Georgia, or South Carolina and 2) the Prothonotary Warbler in the Piedmont of North and South Carolina. I am currently involved in projects to determine the distribution and population structure of these two warblers in areas where their range is not well known. Any suggestions for areas which might harbor such species will also be appreciated.

In addition, I would like to have information on the nature and location of major blackbird and starling roosts in the Carolinas. I plan to conduct a study of their parasites for a research credit course at Davidson College.—MARK SIMPSON JR., *Box 923, Davidson, N.C.*

N.C. Garden Club Wins National Award for Bird Protection

The Garden Club of North Carolina Inc. won the Nannine C. Wallis Silver Trophy for work done in the protection of birds. Donated by the Garden Clubs of Kentucky, this national award was first presented at the 1966 meeting of the National Council of State Garden Clubs. To apply for the award Mrs. Harold M. Draper Jr. of Greensboro, bird chairman of the Garden Club of North Carolina Inc., presented a general resume which included a copy of the Bird Sanctuary Act passed by the General Assembly in 1951. In commenting on the award Mrs. Draper said, "The more than 200 Bird Sanctuaries established throughout North Carolina over the years . . . had much to do with our winning this coveted award the very first year presented! The trophy will be displayed permanently in our Raleigh office."

Mrs. Draper may be remembered by readers of *Wildlife in North Carolina* as the author of "Nature's Feathered Architects." An article urging protection of the Eastern Bluebird has been accepted for future publication in the same magazine.

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Carolina Bird Club

INC.

Founded 6 March 1937 **Incorporated 8 August 1949**

Carolina Bird Club is an incorporated association for the study and conservation of wildlife, particularly birds, chiefly in the Carolinas. Founded in 1937 as the North Carolina Bird Club, it was joined in 1948 by several South Carolina natural history clubs and the name changed to the Carolina Bird Club.

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The Carolina Bird Club, Inc., is a non-profit educational and scientific organization. Dues, contributions and bequests to the club are deductible from State and Federal income and estate taxes. Membership is open to anyone interested in birds, natural history and conservation. The several classes of membership are listed below. Checks should be made payable to Carolina Bird Club, Inc., and sent to CBC Headquarters, Box 1220, Tryon, N.C. 28782.

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